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TRANSPORTATION

Facts & Trends

A STATISTICAL ANALYSIS SHOWING THE IMPORTANCE OF TRANSPORTATION TO THE UNITED STATES, AS WELL AS TRANSPORTATION TRENDS--INCLUDING BOTH FOR-HIRE AND PRIVATE CARRIAGE

SIXTEENTH EDITION

Published - July, 1980

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The Transportation Association of America is an across-the-board national transportation policy organization made up of users, investors, and carriers of all types. It seeks to develop, largely through research and education, sound national policies that will help to assure the best possible transport service at rates reasonable to users yet adequate to enable carriers to provide such service under private ownership and operation.

Prepared by the Research Staff of the

TRANSPORTATION ASSOCIATION OF AMERICA

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INTRODUCTION

This booklet is compiled as a part of the research and educational program of the Transportation Association of America. Its purpose is to illustrate the importance of transportation to the United States and to point out trends in this field. Information given is limited to general and across-the-board data, in order to prevent repetition of single-modal statistical data published by other transportation associations.

It is hoped that this booklet will provide a quick reference source of transportation data which may be useful for speeches, articles, discussion, and other similar purposes. Updated information will be printed in quarterly supplements and distributed for insertion into the booklet. All revisions, as well as new tabulations, will be incorporated into later editions. Detailed source data information is included in a special appendix, which includes explanations of the methods used to estimate many of the figures shown in the tables. We welcome constructive criticism that will help us refine any of these figures.

Assisting the TAA Research Staff in developing this statistical information, both individually and collectively, is the TAA Transport Facts Advisory Committee. This Committee, the members of which are shown below, screens the statistical data developed and makes suggestions for improvement. It is emphasized, however, that members of the Committee are not, by this assistance, giving their endorsement to nor assuming responsibility for any figures shown in the booklet -- except where specifically indicated in the source data section. All estimates and methods of presentation are thus the sole responsibility of the TAA Research Staff.

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CURRENT TRAFFIC TRENDS
TRANSPORTATION PERFORMANCE INDICATORS
(All figures in millions unless otherwise indicated)

				% Change 12 mos. 1978 to 12 mos. 1979
AIR (Scheduled Air Lines)	6 mos. 1979	6 mos. 1980	% Change	
Domestic Passenger-miles	99,476	97,548	- 1.9	+ 11.2
International Passenger-miles	22,204	22,896	+ 3.1	+ 15.5
	6 mos. 1979	6 mos. 1980		
Domestic Ton-miles (Freight, Express, Mail)	2,054	2,012	- 2.0	+ 0.02
International Ton-Miles (Freight, Express, Mail	1,205	1,269	+ 5.3	+ 1.0
HIGHWAY				
AUTO-BUS-TRUCK	4 mos. 1979	4 mos. 1980		
Vehicle-miles 1/ (Billions)	163.3	156.4	- 4.2	- 2.2
BUS (Intercity)	3 mos. 1979	3 mos. 1980		
Passenger-miles 5/	2,394	2,538	+ 6.0	+ 7.5
TRUCK (Intercity)	3 mos. 1979	3 mos. 1980		
Tonnage Survey 2/	--	--	- 16.3	- 0.7
PIPE LINE				
	12 mos. 1978	12 mos. 1979		
Barrels of Oil 4/	10,847	10,960	+ 1.0	+ 1.0
RAIL (Class I, AMTRAK and Autotrain)				
	3 mos. 1979	3 mos. 1980		
Passenger-miles (excluding commutation)	1,548	1,611	+ 4.1	+ 14.6
Commutation Passenger-miles	1,200	1,236	+ 3.0	+ 5.9
	6 mos. 1979	6 mos. 1980		
Ton-Miles (000)	446.4	463.2	+ 3.8	+ 5.2
Car Loadings (cars) (000)	11,852	11,483	- 3.1	+ 2.2
Piggyback (cars loaded) (000)	889	797	- 10.3	+ 0.9
Trailer and Highway Containers (loaded) (000)	1,651	1,545	- 6.4	+ 3.2
WATER				
Great Lakes	5 mos. 1979	5 mos. 1980		
Tons - (Iron Ore, Coal, Grain) (000)	37,242	39,481	+ 6.0	+ 5.0
International (000)	12 mos. 1978	12 mos. 1979		
Long Tons 3/	775,649	823,306	+ 6.1	+ 6.1
Long Tons, in U.S. Flag Vessels	32,107	35,335	+ 10.1	+ 10.1
Per Cent in U.S. Flag Vessels	4.1%	4.3%		
GROSS NATIONAL PRODUCT				
	3 mos. 1979	3 mos. 1980		
Constant 1972 Dollars (billions)	1,430.6	1,444.7	+ 1.0	+ 2.3
INDUSTRIAL PRODUCTION				
	3 mos. 1979	3 mos. 1980		
Seasonally Adjusted Index (1967 = 100)	151.5	152.2	+ 0.5	+ 4.2

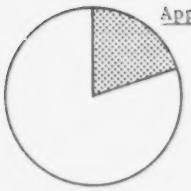
The indicators listed above are used regularly by the respective modes of transport as guides to measure current traffic trends and are the latest figures available at press time. While the specific indicators for each mode are comparable for the periods shown, they are not necessarily comparable between modes. The key column for the purpose of this tabulation is the one on the right that reflects the percentage increase or decrease.

1/ Total mileage traveled by private and commercial passenger and cargo vehicles on main rural highways.
2/ Based on ATA sample of Class I and II common carriers of general freight.
3/ All cargo in U.S. import/export trade, including liner, irregular, and tanker, excluding DOD.
4/ Sample representing approximately 70% of barrels of regulated pipelines.
5/ Estimate for Class I regular-route and charter operations.

see source data page A-1

IMPORTANCE OF TRANSPORTATION* TO U.S. ECONOMY

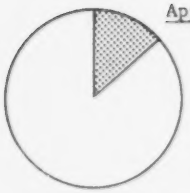
NATIONAL EXPENDITURES



Approximately 20% of our total annual expenditures for goods and services, or our Gross National Product, is made either directly or indirectly for transportation of one kind or another. This percentage relationship has held true throughout the period 1958-1978. In 1978 this amounted to $462.7 billion, which breaks down by major classifications as follows:

Private Auto	$220.3 Billion, or 47.6%	
Non-ICC Regulated Truck	$119.3 Billion, or 25.8%	
ICC/CAB/FERC Regulated Carriers	$ 86.6 Billion, or 18.7%	
Other Transportation Modes	$ 36.5 Billion, or 7.9%	

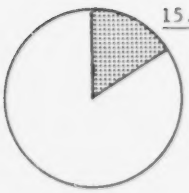
TAXES



Approximately 13.5% of our total Federal taxes come from transportation sources. In 1977, this amounted to $48.3 billion:

Corporate Income Taxes	$ 7.3 Billion, or 15.1%	
Excise Taxes	$10.4 Billion, or 21.5%	
Individual Income & Employment Taxes	$30.6 Billion, or 63.4%	

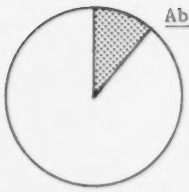
CAPITAL OUTLAYS



15.8% of total business expenditures during 1979 for new plant and equipment represented outlays for transportation equipment and facilities for one kind or another. This amounted to $28.0 billion, broken down as follows:

For-Hire Carriers	10.1 Billion, or 36.1%	
Transport Equipment Manufacturers	7.7 Billion, or 27.5%	
Petroleum and Rubber for Transport	10.2 Billion, or 36.4%	

EMPLOYMENT



About 11% of our total civilian employment is in transportation or transportation related industries. In 1979 this amounted to 10.8 million employes, broken down as follows:

Transportation Services	2.7 Million, or 25.0%	
Transportation Equipment Manufacturers	2.0 Million, or 18.5%	
Government, Suppliers, Misc.	6.1 Million, or 56.5%	

TRANSPORTATION IS A HEAVY USER OF OTHER INDUSTRIES' PRODUCTS, CONSUMING:

75% of Rubber		67% of Lead	
53% of Petroleum		36% of Zinc	
28% of Steel		17% of Cement	
22% of Aluminum		15% of Copper	

* Including for-hire and private services and private and public facilities.

see source data page A-1

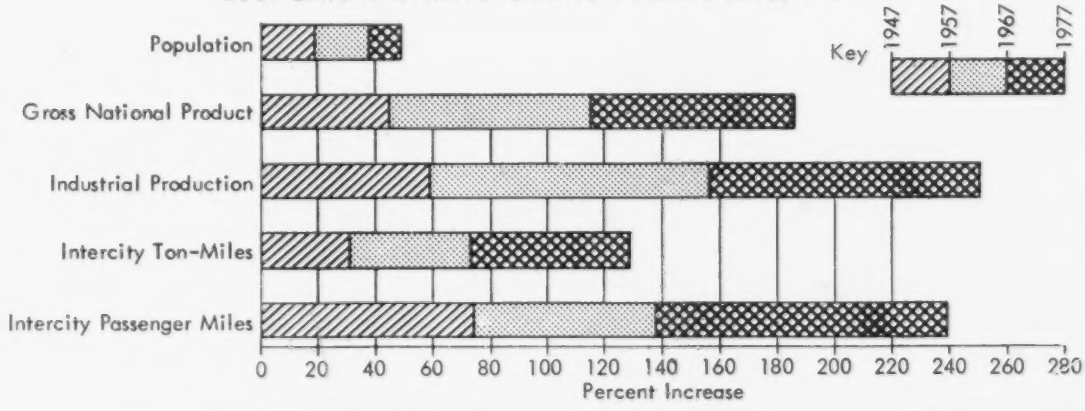
NATIONAL ECONOMIC TRENDS VS. TRANSPORTATION TRENDS: 1939 - 1979

Year	Gross National Product* (billions of dollars) Amount	(a)	(b)	Industrial Production (1967=100) Index	(a)	(b)	Population (millions) Amount	(a)	(b)	Intercity Ton-Miles# (billions) Amount	(a)	(b)	Intercity Passenger-Miles@ (billions) Amount x	(a)	(b)
1939	529	68r		22	56		131	91		544	53		310	73	
1947	775	100		39	100		144	100		1,019	100		427	100	
1948	807	104		41	105		147	102		1,045	103		439	103	
1949	812	105		39	100		149	103		917	90		478	112	
1950	883	114		45	115		152	106		1,063	104		504	118	
1951	954	123		49	126		155	108		1,177	116		570	133	
1952	990	128		51	131		158	110		1,145	112		613	144	
1953	1,029	133		55	141		160	111		1,203	118		650	152	
1954	1,015	131		52	133		163	113		1,123	110		668	156	
1955	1,083	140		59	151		166	115		1,274	125		711	167	
1956	1,107	143		61	156		169	117		1,356	133		746	175	
1957	1,127	145		62	159		172	119		1,336	131		746	175	
1958	1,124	145		58	149		175	122		1,216	119		758	178	
1959	1,192	154		65	167		178	124		1,286	126		763	179	
1960	1,219	157		66	169		181	126		1,314	129		781	183	
1961	1,250	161		67	172		184	128		1,310	129		789	185	
1962	1,322	171		72	185		187	130		1,371	135		815	191	
1963	1,375	177		77	197		189	131		1,453	143		850	199	
1964	1,447	187		82	210		192	133		1,543	151		893	209	
1965	1,532	198		89	228		195	135		1,638	161		917	215	
1966	1,623	209		98	251		197	137		1,747	171		968	227	
1967	1,667	215	100	100	256	100	199	138	100	1,765	173	100	1,017	238	100
1968	1,740	225	104	106	272	106	201	140	101	1,838	180	104	1,075	252	106
1969	1,785	230	107	111	285	111	203	141	102	1,895	186	107	1,134	266	112
1970	1,779	230	107	108r	277	108	205	142	103	1,936	190	110	1,181r	277r	116
1971	1,833	236	110	110r	282	110	207	144	104	1,954	192	111	1,225	287	120
1972	1,938	250	116	120r	308	120	209	145	105	2,073	203	117	1,296	304	127
1973	2,043	264	123	130r	333	130	210	146	106	2,232	219	126	1,345r	315r	132
1974	2,015	260r	121	129r	331	129	212	147	107	2,212	217	125	1,256r	294	124r
1975	1,989	257r	119	118r	303	118	214	149	108	2,066r	203	117	1,307	306	129
1976	2,106	272r	126	131r	336r	131r	215	149	108	2,203r	216r	125	1,415r	331	139
1977	2,218	286r	133	138r	345r	138r	217	150	109	2,308r	226r	131r	1,461r	342r	144r
1978	2,315	299r	139r	146r	374r	146r	219	152	110	2,470r	242r	140r	1,555r	364r	153r
1979	2,369	306	142	152	390	152	220	153	111	2,589	254	147	1,554	364	153

* Total output of goods and services in constant 1979 dollars.
\# Includes both regulated and unregulated carriers.
@ Includes both for-hire and private carriers, including auto.
x Revised to omit intercity water traffic due to unreliable source.

(a) Index with 1947 = 100
(b) Index with 1967 = 100
r Revised.

ECONOMIC AND TRANSPORTATION TRENDS SINCE 1947



see source data page A-1

TRANSPORTATION OUTLAYS VS. GROSS NATIONAL PRODUCT

The Nation's Estimated Transportation Bill
(Billions of Dollars)

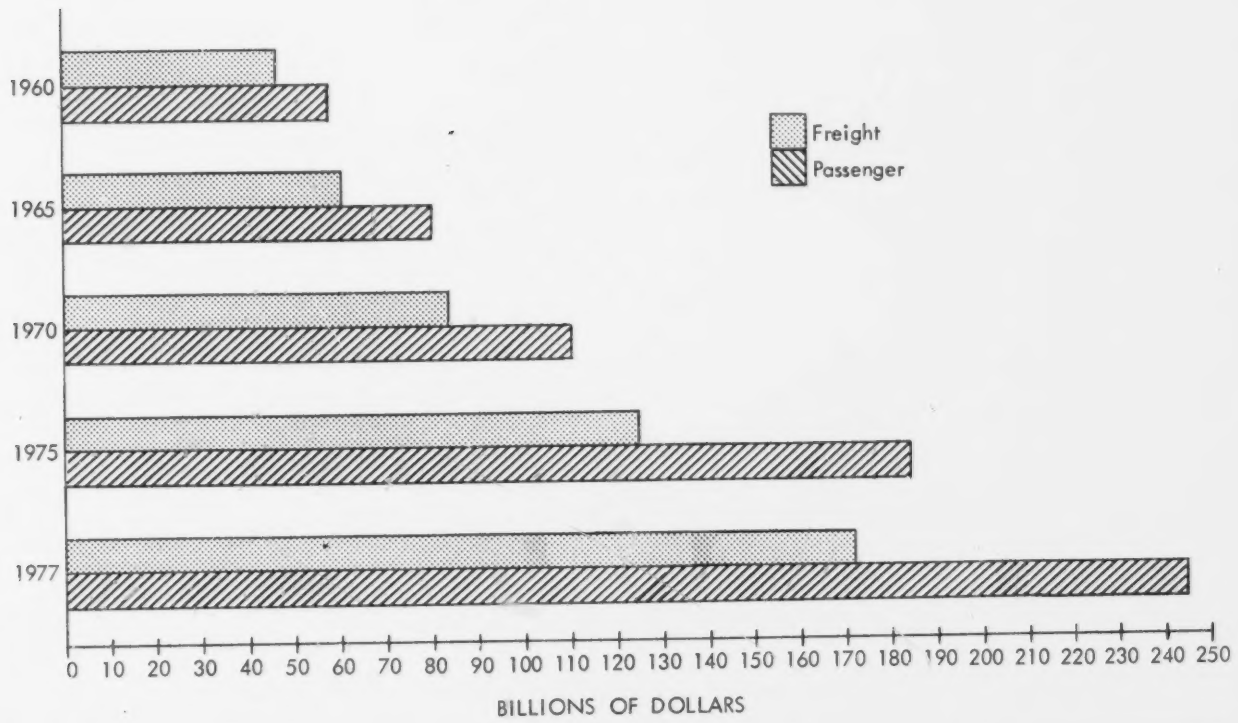
	1960	1965	1970	1974	1975	1976	1977	1978
Passenger Bill	58.1	81.4	111.8	168.8	185.2	215.0	244.1	270.1
Freight Bill	46.8	61.1	83.8	124.5	126.0	145.8	167.2	192.6
Totals	104.9	142.5	195.6	293.3	311.2	360.8	411.3	462.7
Adjustments	-.9	-1.4	-.9	-2.0	+.1	-1.4	-4.2	-4.8e
Adjusted Totals	104.0	141.1	194.7	291.3	311.3	359.4	407.1	457.9
Gross Natl. Product	503.7	688.1	982.4	1,412.9	1,528.8	1,702.2	1,899.5	2,127.6
Percent Trans. of GNP#	20.09	20.00	19.34	19.02	19.87	20.66	20.98	21.10

* Government transport expenditures not included in passenger or freight bills, less duplications. See source data.

\# Percentage computation exludes from "Adjusted Totals" interest on debt for private autos, which is no longer considered part of GNP.

e Estimate.

FREIGHT vs. PASSENGER OUTLAYS



see source data page A-1

THE NATION'S ESTIMATED FREIGHT BILL*
(In Millions of Dollars)

	1960	1965	1970	1974	1975	1976	1977	1978
Highway								
Truck-Intercity								
ICC-Regulated	7,214	10,068	14,585	22,700	22,000	26,000	31,000	36,500
Non-ICC Regulated	10,744	13,560	18,968	26,118	25,400r	30,245	36,356r	43,069
Truck - Local[x]	13,498	20,120	28,819	44,706	47,790	54,246r	60,739r	67,630
Bus	42	70	122	145	156	180	179r	205
	31,498	43,818	62,494	93,669	95,346r	110,671r	128,274r	147,404
Rail								
Railroads[#]	9,028	9,923	11,869	16,953	16,509	19,196r	20,463r	21,896
Water								
International	1,765	2,081	3,187	5,266	4,928	5,441	6,686r	7,303
Coastal, Intercoastal	747	692	834	1,004	1,136	1,296	1,471r	2,421
Inland Waterways	312	381	473	899	950	1,139	1,125r	1,300
Great Lakes	227	213	239	340	348	390	326r	521
Locks, Channels, etc.	287	391	376	512	526	594	680	834
	3,338	3,758	5,109	8,021	7,888	8,860	10,288r	12,379
Oil Pipe Line								
ICC-Regulated	770	904	1,188	1,587	1,874	2,137	2,792r	4,907
Non-ICC Regulated	125	147	208	291	346	395	417r	545
	895	1,051	1,396	1,878	2,220	2,532	3,209r	5,452
Air								
Domestic	220	428	720	1,043	1,073	1,247	1,484	1,729
International	134	280	451	702	765	805	873	925
	354	708	1,171	1,745	1,838	2,052	2,357	2,654
Other Carriers[@]								
Forwarders & REA Express	376	470	358	481	418	548	596r	583
Other Shipper Costs								
Loading & Unloading Freight Cars	1,097	1,106	1,059	1,320	1,279	1,361	1,429	1,531
Operation of Traffic Departments	241	293	374	476	511	559	611	654
	1,338	1,399	1,433	1,796	1,790	1,920	2,040	2,185
GRAND TOTAL	46,827	61,127	83,830	124,543	126,009r	145,779r	167,227r	192,553
GROSS NATIONAL PRODUCT (Billions of Dollars)	503.7	688.1	982.4	1,412.9	1,528.8	1,702.2	1,899.5	2,127.6
GRAND TOTAL % OF GNP[**]	9.30	8.88	8.53	8.81	8.24	8.56r	8.80r	9.05

r Revised.
* Includes mail and express.
@ Domestic ICC regulated carriers. Figures are operating revenues remaining after payments for other carriers' services.
** Exclusive of non-reimbursed, but unallocable, outlays by government for transport facilities.
x Revised to eliminate small trucks used for predominately personal transportation, which is now shown in "The Nation's Estimated Passenger Bill", page 5. See source data.
Revised to include Federal grants and other aids. See source data.

see source data page A-2

THE NATION'S ESTIMATED PASSENGER BILL
(In Millions of Dollars)

PRIVATE TRANSPORTATION*	1960	1965	1970	1974	1975	1976	1977	1978
Auto								
New and Used Cars	20,237	30,373	32,668	44,184	48,023	62,910r	74,201r	82,220
Tires, Tubes, Accessories	2,768	3,792	5,396	8,131	8,812	9,813r	11,198r	12,282
Gasoline and Oil	14,414	19,595	29,329	48,455	52,679	57,227r	62,251r	67,877
Tolls	362	545	756	899	938	989	1,034	1,080
Insurance Less Claims	2,313	2,799	4,335	5,811	4,436	6,238	8,720r	10,111
Interest on Debt	2,777	3,523	4,662	7,331	7,451	7,801	8,581e	9,010e
Auto Registration Fees	863	1,119	1,669	2,017	2,053	2,366	2,468	2,630
Operator's Permit Fees	119	149	222	263	264	306	321	340
Repair, Greasing, Washing, Parking, Storage, Rental	6,115	8,119	13,233	20,718	23,968	27,231r	30,445r	34,705
	49,968	70,014	92,270	137,809	148,624	174,881r	199,228r	220,255
Small Truck#	327	1,097	2,420	4,859	6,129	6,987r	7,767r	8,609
Air								
Aircraft	202	343	354	830	966	1,188	1,515r	1,726
Operating Costs	693	1,027	2,275	3,581	3,767	3,983	3,730r	3,917e
	895	1,370	2,629	4,411	4,733	5,171	5,245r	5,643
Total Private[r]	51,190	72,481	97,319	147,079	159,486	187,039r	212,240r	234,507
FOR-HIRE-TRANSPORTATION								
Local								
Bus and Transit[x]	1,337	1,454	1,841	2,422	4,894	4,456	5,329	6,161
Taxi	858	862	1,411	1,589	1,829	2,022	2,175	2,224
Railroad Commutation	122	136	172	200	206	224	230	240
School Bus	486	707	1,219	1,858	2,174	2,372	2,502	2,731
	2,803	3,159	4,643	6,069	9,103	9,074	10,236	11,356
Intercity								
Air	2,062	3,315	6,605	10,823	11,242	12,958	14,851r	17,098
Bus	559	629	799	1,007	1,016	1,053	1,124r	1,189
Rail[z]	637	462	264	479	641	854r	1,197r	1,294
Water	14	12	12	16	16	7r	17r	21
	3,272	4,418	7,680	12,325	12,915	14,872r	17,189	19,602
International								
Air	598	997	1,925	3,003	3,448	3,742	4,204	4,399
Water	267	333	275	259	278	270	269	281
	865	1,330	2,200	3,262	3,726	4,012	4,473	4,680
Total For-Hire[r]	6,940	8,907	14,523	21,656	25,744	27,958r	31,898r	35,638
GRAND TOTAL Private and For-Hire** r	58,130	81,388	111,842	168,735	185,230	214,997r	244,138r	270,145
GROSS NATIONAL PRODUCT (Billions of Dollars)	503.7	688.1	982.4	1,412.9	1,528.8	1,702.2r	1,899.5r	2,127.6
GRAND TOTAL AS % OF GNP@ r	10.99	11.32	10.91	11.42	11.63	12.17r	12.40r	12.27

e Estimate.
r Revised.
* Includes business-owned autos and aircraft.
** Excludes non-reimbursed but allocable outlays by government for transport facilities.
@ Excludes auto interest on debt, which is no longer considered part of GNP.
# Personal use of vans and pickup trucks. See source data for further explanation.
x Revised to include Federal, state and local operating subsidies and capital grants.
z Revised to include Federal operating subsidies and capital grants for Amtrak.

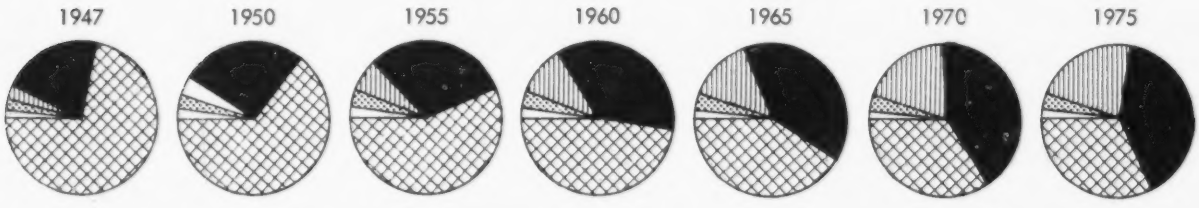
see source data page A-3

REVENUES OF ICC, CAB AND FERC REGULATED CARRIERS IN DOMESTIC OPERATION
(Millions of Dollars)

	1947	1950	1955	1960	1965	1970	1975	1977	1978
Freight									
Railroad	7,801	8,818	9,545	9,028	9,923	11,869	16,573	20,184r	21,718
Truck	2,214	3,737	5,535	7,214	10,068	14,585	22,000	31,000	36,500
Oil Pipe Line	325	442	678	770	904	1,188	1,874	2,792r	4,907
Water Carrier	131	165	344	348	353	438	850	800r	847
Air Carrier	55	123	139	220	428	720	1,073	1,484	1,729
Bus	6	11	21	42	70	122	156	182	200
Freight Forwarder	238	286	401	438	461	600	1,141	1,911	1,864
REA Express	442	320	388	373	435	313	133	0	0
Totals	11,212	13,902	17,051	18,433	22,642	29,835	43,800	58,353r	67,765
Passenger									
Railroad	1,126	959	856	722	634	495	709	835r	833
Water Carrier	16	36	18	18	16	22	37	41	46
Air Carrier	325	522	1,152	1,959	3,283	6,438	10,397	13,887r	15,867
Bus	528	528	539	625	815	940	1,204	1,228r	1,280
Totals	1,995	2,045	2,565	3,324	4,748	7,895	12,347	15,991r	18,026
Total Revenues*									
Railroad	9,167	9,969	10,650	9,978	10,772	12,522	17,357	21,214	22,570
Truck	2,214	3,737	5,535	7,214	10,068	14,585	22,000	31,000	36,500
Oil Pipe Line	325	442	678	770	904	1,188	1,874	2,792r	4,907
Water Carrier	225	330	452	427	426	502	946	924	944
Air Carrier	380	645	1,291	2,212	3,741	7,242	12,116	15,936r	18,321
Bus.	534	539	560	667	885	1,062	1,360	1,410r	1,480
Freight Forwarder	238	286	401	438	461	600	1,176	1,911	1,864
REA Express	442	320	388	373	435	313	133	0	0
Totals	13,525	16,268	19,955	22,079	27,692	38,014	56,962	75,187r	86,586
Gross National Product# (Billions of Dollars)	232.8	286.2	399.3	506.0	688.1	982.4	1,528.8	1,899.5	2,127.6
Percent of Carrier# Revenues to GNP	5.8%	5.7%	5.0%	4.4%	4.0%	3.9%	3.7%	4.0%	4.1%

* May exceed, in some cases, sum of Freight and Passenger totals due to inclusion of operating revenues not allocated to either freight or passenger service.
\# All figures reflect revisions in GNP.
r Revised.

RELATIVE DISTRIBUTION OF TOTAL REVENUES



	1947	1950	1955	1960	1965	1970	1975	1977r	1978
RR & REA	72.3%	64.3%	56.4%	47.8%	41.2%	34.3%	31.4%	28.0%	26.6%
HIGHWAY	20.7%	25.8%	31.2%	36.4%	40.2%	41.8%	41.8%	42.9%	44.9%
AIR	2.9%	4.0%	6.6%	10.2%	13.7%	19.4%	21.7%	24.2%	21.6%
PIPE LINE	2.4%	2.8%	3.5%	3.6%	3.3%	3.2%	3.4%	3.7%	5.8%
WATER	1.7%	2.1%	2.3%	2.0%	1.6%	1.3%	1.7%	1.2%	1.1%

see source data page A-4

see source data page A-5

TRANSPORTATION REVENUE vs. GENERAL PRICE TRENDS
(In Cents)

Average Revenue Per Ton-Mile vs. Producer Prices

	Rail (Class I)		Truck (Class I)		Air (Domestic)#		Oil Pipe Line		Barge		Producer Prices@	
Year	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1965=100	Index 1967=100	Index 1947=100
1947	1.08	100	4.85	100	24.18	100	.292	100			74	100
1950	1.33	123	5.01	103	18.10	75	.315	108			79	107
1955	1.37	127	5.80	120	21.15	87	.322	110			86	116
1960	1.40	130	6.31	130	22.80	94	.315	108			94	127
1965	1.27	118	6.46	133	20.46	85	.279	96	.346	100	96	130
1970	1.43	132	7.46	154	21.91#	91	.271	93	.303	88	110	149
1971	1.59	147	7.85	162	22.58	93	.285	98	.339	98	114	154
1972	1.62	150	8.00	165	22.75	94	.285	98	.328	95	117	158
1973	1.62	150	8.34	172	23.31	96	.291	100	.381	110	128	173
1974	1.85	171	8.73	180	25.92	107	.315	108	.492	142	148	200
1975	2.04	189	9.20	190	28.22	117	.368	126r	.518	150r	163	220
1976	2.19	203	9.97	206	31.81	132	.409	140	.507	147r	170	230
1977	2.29	212	10.85r	224r	34.22	142	.403e	138	.557r	161r	181	245
1978	2.37	219	11.50(e)	237r	37.10	153			.622	180	195	264
1979	2.62	242			41.30	171					216	292

Average Revenue Per Passenger-Mile vs. Consumer Prices

	Rail (Class I)*		Bus (Class I)		Air (Domestic Scheduled)#				Consumer Prices	
					Coach	1st Class	Total			
Year	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Revenue	Revenue	Index 1947=100	Index 1967=100	Index 1947=100
1947	2.10	100	1.71	100	- -	5.05	5.05	100	67	100
1950	2.56	122	1.89	111	4.11	5.79	5.56	110	72	107
1955	2.60	124	2.06	120	4.32	5.90	5.36	106	80	119
1960	3.01	143	2.71	158	5.01	7.06	6.09	121	89	133
1965	3.18	151	2.88	168	5.52	7.33	6.06	120	95	142
1970	3.91	186	3.60	211	5.45#	8.30#	6.00#	119	116	173
1971	4.31	205	3.83	224	5.83	8.59	6.33	125	121	181
1972	4.75	226	3.98	233	5.88	8.70	6.40	127	125	187
1973	4.76	227	4.05	237	6.11	8.93	6.63	131	133	199
1974	5.21	248	4.41	258	6.94	9.89	7.52	149	148	221
1975	5.40	257	4.83	282	7.05	10.56	7.68	152	161	240
1976	5.74	273	5.16	302	7.49	11.50	8.16	162	171	255
1977	5.92	282	5.18	303	7.92	12.21	8.61	170	182	272
1978	5.96	283	5.65r	330r	7.81	11.98	8.49	168	195	291
1979	6.26	298	6.20	363	8.34	11.34	8.94	177	217	324

r Revised.
e Estimated.
Includes Alaska and Hawaii from 1969 on.
* Includes commutation, which was excluded from previously published tables.

@Name changed from Wholesale to Producer Prices in 1978, with moderate revisions.

INTERCITY FREIGHT BY MODES*
(Billions of Ton-Miles)

YEAR	RAIL# Amount	%	TRUCK Amount	%	OIL PIPELINE Amount	%	GREAT LAKES Amount**	%	RIVERS & CANALS Amount**	%	AIR Amount	%	TOTAL
1939	339	62.3	53	9.7	56	10.3	76	14.0	20	3.7	.01	.00	544
1940	379	61.3	62	10.0	59	9.5	96	15.5	22	3.6	.02	.00	618
1941	482	62.4	81	10.5	68	8.8	114	14.8	27	3.5	.02	.00	772
1942	645	69.5	60	6.5	75	8.1	122	13.1	26	2.8	.04	.00	928
1943	735	71.3	57	5.5	98	9.5	115	11.2	26	2.5	.05	.00	1,031
1944	747	68.7	58	5.3	133	12.2	119	10.9	31	2.8	.07	.01	1,088
1945	691	67.2	67	6.5	127	12.4	113	11.0	30	2.9	.09	.01	1,028
1946	602	66.6	82	9.1	96	10.6	96	10.6	28	3.1	.08	.01	904
1947	665	65.3	102	10.0	105	10.3	112	11.0	35	3.4	.11	.01	1,019
1948	647	61.9	116	11.1	120	11.5	119	11.4	43	4.1	.15	.01	1,045
1949	535	58.3	127	13.8	115	12.5	98	10.7	42	4.6	.20	.02	917
1950	597	56.2	173	16.3	129	12.1	112	10.5	52	4.9	.30	.03	1,063
1951	655	55.6	188	16.0	152	12.9	120	10.2	62	5.3	.34	.03	1,177
1952	623	54.4	195	17.0	158	13.8	105	9.2	64	5.6	.34	.03	1,145
1953	614	51.0	217	18.0	170	14.1	127	10.6	75	6.2	.37	.03	1,203
1954	557	49.6	213	19.0	179	15.9	91	8.1	83	7.4	.38	.03	1,123
1955	631	49.5	223	17.5	203	15.9	119	9.3	98	7.7	.49	.04	1,274
1956	656	48.4	249	18.4	230	17.0	111	8.2	109	8.0	.58	.04	1,356
1957	626	46.9	254	19.0	223	16.7	117	8.8	115	8.6	.68	.05	1,336
1958	559	46.0	256	21.1	211	17.4	80	6.6	109	9.0	.70	.05	1,216
1959	582	45.3	279	21.7	227	17.7	80	6.2	117	9.1	.80	.06	1,286
1960	579	44.1	285	21.8	229	17.4	99	7.5	121	9.2	.89	.07	1,314
1961	570	43.5	296	22.7	233	17.8	87 (67)	6.6	123 (84)	9.4	1.01	.08	1,310
1962	600	43.8	309	22.5	238	17.3	90 (66)	6.6	133 (90)	9.7	1.30	.09	1,371
1963	629	43.3	336	23.1	253	17.4	95 (68)	6.5	139 (94)	9.6	1.30	.09	1,453
1964	666	43.2	356	23.1	269	17.4	106 (73)	6.9	144 (102)	9.3	1.50	.10	1,543
1965	709	43.3	359	21.9	306	18.7	110 (76)	6.7	152 (110)	9.3	1.91	.12	1,638
1966	751	43.0	381	21.8	333	19.1	116 (81)	6.6	164 (117)	9.4	2.25	.13	1,747
1967	731	41.4	389	22.0	361	20.5	107 (75)	6.1	174 (128)	9.9	2.59	.15	1,765
1968	757	41.2	396	21.5	391	21.3	112 (75)	6.1	179 (139)	9.7	2.90	.16	1,838
1969	774#	40.8	404	21.3	411	21.7	115 (83)	6.1	187 (144)	9.9	3.20	.17	1,894
1970	771	39.7	412	21.3	431	22.3	114 (79)	5.9	205 (156)	10.6	3.30	.17	1,936
1971	746	38.2	445	22.8	444	22.7	105 (70)	5.4	210 (161)	10.7	3.50	.18	1,954
1972	784	37.7	470	22.7	476	23.0	109 (73)	5.3	229 (178)	11.1	3.70	.18	2,072
1973	858	38.5	505	22.6	507	22.7	126 (84)	5.6	232 (172)	10.4	3.95	.18	2,232
1974	852	38.5	495	22.4	506	22.9	107 (79)	4.8	248 (183)	11.2	3.91	.18	2,212
1975	759	36.7	454	22.0	507	24.5	99 (69)	4.8	243 (180)	11.8	3.73	.18	2,066
1976	800	36.3	510	23.2	515	23.4	106 (71)	4.8	267 (197)	12.1	4.54	.20	2,203
1977	834r	36.1	555	24.1	546	23.7	91r (52)	3.9	277r (202)	12.0r	4.91	.21	2,308r
1978	868r	35.1r	602	24.4r	586r	23.7r	119r (76)	4.8	290r (209)	11.7r	5.21	.20r	2,470r
1979	920	35.5	628	24.3	605	23.4	126	4.9	305	11.8	5.23	.20	2,589

* Includes both for-hire and private carriers and also mail and express. (Mail and express deleted from Rail beginning in 1969.)

** See source data for figures in parentheses, which are based on different reporting techniques.

Effective 1969, no longer includes mail and express.

r Revised.

Domestic Deep Sea**
(Billions of Ton-Miles)

1939	242	1947	217	1955	261		1963	244	(316)	1971	276	(360)
1940	252	1948	214	1956	255		1964	237	(312)	1972	264	(352)
1941	256	1949	221	1957	248		1965	227	(303)	1973	226	(328)
1942	96	1950	NA	1958	240		1966	225	(307)	1974	230	(323)
1943	66	1951	NA	1959	264		1967	232	(310)	1975	223	(316)
1944	70	1952	NA	1960	256		1968	227	(304)	1976	218	(323)
1945	128	1953	262	1961	253	(312)	1969	225	(301)	1977	229	(343)
1946	238	1954	NA	1962	251	(318)	1970	276	(360)	1978	416	(540)

see source data page A-6

INTERCITY FREIGHT FEDERALLY REGULATED

(Percent of Total Ton-Miles Per Mode, as shown on Page 8)

Year	Rail	Truck	Oil Pipeline	Water* Domestic Deep Sea	Water* Great Lakes	Water* Rivers & Canals	Air@	Total Intercity Ton-Miles#	Percent Federally Regulated
1939	100	37.7					100		
1940	100	33.9					100		
1941	100	33.3					100		
1942	100	46.7					100		
1943	100	50.9					100		
1944	100	46.6					100		
1945	100	40.3					100		
1946	100	36.6					100		
1947	100	36.9					100		
1948	100	40.5					100		
1949	100	37.8					100		
1950	100	38.2					100		
1951	100	38.3					100		
1952	100	36.4					100		
1953	100	35.5					100		
1954	100	33.8					100		
1955	100	37.2	79.0				100	1,535	
1956	100	33.3	78.2				100	1,611	
1957	100	33.1					100	1,584	
1958	100	32.8					100	1,456	
1959	100	36.2					100	1,550	
1960	100	36.5					100	1,570	
1961	100	35.5					100	1,563	
1962	100	36.2	86.4	7.0	1.0	20.4	100	1,622	59.1
1963	100	36.0	85.7	5.5	1.0	18.9	100	1,697	59.2
1964	100	35.4	85.4	6.1	1.0	17.9	100	1,780	59.6
1965	100	39.0	86.0	7.4	0.9	17.7	100	1,865	62.1
1966	100	37.6	85.9	7.5	0.9	19.2	100	1,972	62.3
1967	100	36.0	86.0	5.4	1.0	14.9	100	1,997	61.1
1968	100	39.2	84.9	5.1	1.1	15.5	100	2,065	62.3
1969	100	41.3	84.3	4.4	1.1	14.6	100	2,120	62.5
1970	100	40.5	85.1	4.6	1.2	15.1	100	2,212	60.9
1971	100	41.6	83.7	4.2	0.8	14.5	100	2,230	60.3
1972	100	42.1	84.5	5.0	0.6	16.0	100	2,337	60.6
1973	100	43.8	84.5	7.1	0.7	15.8	100	2,458	63.6
1974	100	44.0	84.5	6.3	0.4	16.5	100	2,442	63.6
1975	100	44.1	84.4	4.1	0.3	15.5	100	2,289	62.6
1976	100	44.1	84.4	3.7	0.2	16.3	100	2,421	62.2
1977	100	44.1		3.9	0.4	13.8	100	2,537	
1978	100	44.0		1.7	0.2	11.6	0	2,886	

Note: Where no figures are shown, data are unavailable.

* Percentages for water modes are computed on the basis of the traffic which originates and terminates within each respective category, i.e., the ton-miles shown in parentheses on page 8.

@ Small, but unknown, percentage is state regulated only. Federal regulation of air freight eliminated by legislation in 1977.

\# Total ton-miles not shown prior to 1955 due to lack of series continuity in water ton-miles for "Domestic Deep Sea" (see page 8).

r Revised.

see source data page A-6

DOMESTIC INTERCITY TONNAGE CARRIED BY MODE
(Millions of Tons)

Year	Rail Class I & II	%	Truck ICC-Regulated	%	Truck 1/ Non-ICC Regulated	%	Oil Pipeline	%	Great Lakes	%	Rivers & Canals	%	Deep Sea	%	Air	%	Total	%	Year
1939	955		48		193		148												1939
1940	1,069		61		211		154												1940
1941	1,296		77		312		171												1941
1942	1,498		83		204		175												1942
1943	1,557		96		196		196												1943
1944	1,565		105		218		244												1944
1945	1,493		108		286		241												1945
1946	1,432		112		354		222												1946
1947	1,613	56.1	135	4.7	421	14.7	238	8.3	163	5.7	150	5.2	153	5.3	.2	-	2,873	100	1947
1948	1,580	53.9	166	5.7	406	13.9	262	8.9	172	5.9	170	5.8	174	5.9	.2	-	2,930	100	1948
1949	1,284	48.5	176	6.6	454	17.1	261	9.9	146	5.5	166	6.3	161	6.1	.3	-	2,648	100	1949
1950	1,421	46.7	213	7.0	581	19.1	284	9.3	170	5.6	191	6.3	183	6.0	.4	-	3,043	100	1950
1951	1,547	46.6	237	7.1	634	19.1	325	9.8	178	5.4	213	6.4	187	5.6	.3	-	3,321	100	1951
1952	1,447	44.4	243	7.5	670	20.6	338	10.4	154	4.7	217	6.7	184	5.7	.4	-	3,253	100	1952
1953	1,448	42.4	270	7.9	737	21.6	359	10.5	189	5.5	225	6.6	189	5.5	.4	-	3,417	100	1953
1954	1,279	39.5	271	8.4	762	23.6	373	11.5	145	4.5	217	6.7	187	5.8	.4	-	3,234	100	1954
1955	1,459	40.9	314	8.8	749	21.0	413	11.6	185	5.2	250	7.0	196	5.5	.5	-	3,567	100	1955
1956	1,521	39.7	330	8.6	893	23.3	441	11.5	174	4.5	270	7.0	206	5.4	.5	-	3,836	100	1956
1957	1,449	39.5	330	9.0	783	21.4	441	12.0	182	5.0	281	7.7	196	5.4	.5	-	3,663	100	1957
1958	1,247	36.8	329	9.7	793	23.4	433	12.8	132	3.9	261	7.7	194	5.7	.5	-	3,390	100	1958
1959	1,293	36.7	375	10.6	781	22.1	464	13.1	131	3.7	282	8.0	206	5.8	.6	-	3,533	100	1959
1960	1,301	36.1	387	10.7	794	22.0	468	13.0	155	4.3	291	8.1	209	5.8	.6	-	3,606	100	1960
1961	1,253	34.0	401	10.8	922	24.9	484	13.1	137	3.7	294	7.9	207	5.6	.8	-	3,699	100	1961
1962	1,294	33.4	440	11.3	981	25.3	502	12.9	136	3.5	316	8.1	215	5.5	.9	-	3,885	100	1962
1963	1,347	32.4	458	11.0	1,049	25.2	521	12.5	142	3.4	332	8.0	314	7.5	1.0	-	4,164	100	1963
1964	1,420	32.5	497	11.4	1,173	26.9	559	12.8	151	3.5	358	8.2	206	4.7	1.2	-	4,365	100	1964
1965	1,479	33.3	557	12.6	1,084	24.4	588	13.3	154	3.5	370	8.3	202	4.6	1.4	-	4,435	100	1965
1966	1,543	33.1	606	12.9	1,138	24.3	630	13.5	164	3.5	390	8.3	208	4.4	1.7	-	4,681	100	1966
1967	1,498	31.3	600	12.5	1,245	26.0	679	14.2	154	3.2	399	8.3	215	4.5	1.9	-	4,792	100	1967
1968	1,515	31.3	642	13.2	1,169	24.1	726	15.0	151	3.1	430	8.9	214	4.4	2.4	-	4,849	100	1968
1969	1,558	31.6	639	13.0	1,129	22.9	760	15.4	161	3.3	461	9.4	217	4.4	2.6	-	4,928	100	1969
1970	1,572	31.1	661	13.1	1,167	23.1	790	15.6	157	3.1	472	9.3	238	4.7	2.9	-	5,060	100	1970
1971	1,472	29.4	707	14.1	1,155	23.1	807	16.1	141	2.8	479	9.6	243	4.9	2.9	-	5,007	100	1971
1972	1,531	29.3	771	14.7	1,163	22.2	876	16.7	145	2.8	507	9.7	243	4.6	3.3	-	5,239	100	1972
1973	1,616	29.7	830	15.2	1,198	22.0	912	16.7	157	2.9	503	9.2	237	4.3	3.5	-	5,457	100	1973
1974	1,619	30.3	800	14.9	1,155	21.6	885	16.6	146	2.7	511	9.5	233	4.4	3.5	-	5,353	100	1974
1975	1,471	29.6	714	14.4	1,030	20.8	879	17.7	129	2.6	504	10.2	232	4.7	3.2	-	4,962	100	1975
1976	1,477	28.0	808	15.3	1,166	22.1	934	17.7	132	2.5	524	9.9	236	4.5	3.4	-	5,280	100	1976
1977	1,463	26.7r	877	16.0r	1,266	23.1r	986r	18.0r	109	2.0	529	9.6	248	4.5	3.6		5,482r	100	1977
1978	1,481r	25.7	925	16.1	1,335	23.2	1,032	17.9	143r	2.5	535r	9.3	305r	5.3	3.9		5,760	100	1978
1979	1,560		917		1,323										3.7				1979

r Revised.

see source data page A-7

See source data page A-7

REGULATED INTERCITY SMALL SHIPMENTS TRAFFIC

(Includes shipments under 10,000 pounds)

Year	Direct carriers						Indirect carriers						
	Motor LTL class I & II	Rail LCL class I & II	Bus express 1/	Water carrier 2/	Air freight	United Parcel Service 3/	REA Surface	REA Air Express	Freight forwarders class A 4/	Parcel Post	Air parcel post 5/	Total	Index 1950=100
	NET TONS - IN THOUSANDS												
1950	53,405	22,164	168	534	289	25	2,747	50	4,204	3,475	11	87,072	100
1955	54,132	14,045	183	268	389	112	1,995	66	4,697	2,711	18	78,616	90
1960	62,144	6,447	202	175	510	386	1,390	70	4,100	2,581	26	78,031	90
1965	76,896	2,125	224	351	1,137	627	1,845	110	3,994	2,137	43	89,489	103
1970	78,099	1,177	248	197	2,478	2,503	847	117	4,203	1,640	185	91,694	105
1975	85,030	479	276	182	3,097	5,166	NA	NA	4,746	1,145	220	100,341	115
1976	78,677r	550	281	305	3,330	4,865	NA	NA	4,400	875	217	93,500r	107
1977	86,524	485	288	253	NA	6,336	NA	NA	4,798	1,023	250	99,957	115
1978	90,389	553	294	105	NA	6,978	NA	NA	4,838	649	255	104,061	120
	TOTAL REVENUE - IN MILLIONS OF DOLLARS												
1950	1,027	356	8	9	44	NA	284	23	287	381	13	2,432	100
1955	1,465	283	16	7	75	NA	335	40	401	551	30	3,203	132
1960	2,123	154	33	6	116	5	309	50	437	561	43	3,837	158
1965	3,100	53	61	14	322	93	350	80	459	621	75	5,228	215
1970	4,193	37	102	11	812	420	207	101	594	647	282	7,406	305
1975	6,030	18	131	8	1,558	1,175	NA	NA	1,158	545	411	11,034	454
1976	7,368r	17	152	16	1,795	1,228	NA	NA	1,653	477	411	13,117r	540
1977	8,407	22	154	8	NA	2,329	NA	NA	1,894	554	467	13,835	569
1978	9,403	23	173	5	NA	2,776	NA	NA	1,857	417	497	15,151	623

1/ Estimated 2.10% increase for each year from 1960 to present. 2/ Includes class A and B water carriers and maritime carriers. 3/ 1974-1965 series inconsistent with 1964-1950 series. See source data. 4/ Tons received from shippers. 5/ Includes heavy-weighted pieces of first class mail beginning Jan. 7, 1968 (Public Law 90-206, Dec. 16, 1967). 6/ Total may not equal sum of individual columns due to rounding. (p) Preliminary. N/A Not available. r Revised.

Per Cent Distribution of Intercity Ton-Miles by Means of Transport
(For Years 1972 and 1967)

	Survey Year	Ton-Miles° (Millions)	Rail	Truck		Air	Water	Other@/ Unknown
				For-Hire	Private			
Totals for 23 Shipper Groups*	1972	438,705	57.0	28.5	9.1	.3	4.4	.7
	1967	389,622	61.8	24.3	6.9	.1	6.3	.6
	1963#	336,231	62.3	24.4	7.5	.2	4.4	1.2
1. Meat & Dairy Products	1972	17,520	27.8	54.4	17.2	---	.2	.4
	1967	15,540	46.0	37.7	15.1	---	.7	.5
2. Canned, Frozen & Other Food Products	1972	62,726	66.8	18.3	9.5	---	5.0	.4
	1967	62,983	73.7	15.9	7.2	---	3.1	.1
3. Candy, Beverages & Tobacco Products	1972	14,400	43.2	28.8	25.8	---	1.9	.3
	1967	14,835	56.6	25.6	15.0	.1	2.1	.6
4. Textile Mill & Leather Products	1972	6,678	16.3	60.9	21.0	.2	---	1.6
	1967	6,268	16.6	63.2	16.1	.3	1.9	1.9
5. Apparel & Related Products	1972	3,146	13.4	67.0	9.5	4.8	.1	5.2
	1967	2,377	15.0	66.1	7.8	1.9	.3	8.9
6. Paper & Allied Products	1972	40,553	74.0	18.9	5.6	---	1.3	.2
	1967	34,966	77.3	15.7	4.2	---	2.3	.5
7. Chemicals, Plastics, Synthetic Rubber & Fibers	1972	47,821	63.2	21.6	4.7	---	10.0	.5
	1967	43,662	64.2	16.7	3.0	---	15.8	.3
8. Drugs, Paints & Other Chemical Products	1972	22,580	44.4	32.0	8.4	.1	14.4	.7
	1967	19,090	52.6	30.4	7.9	.1	8.5	.5
9. Rubber & Plastic Prods.	1972	8,142	32.1	56.8	9.3	1.0	.3	.5
	1967	5,307	34.5	57.0	5.5	.6	.5	1.9
10. Lumber & Wood Products, Except Furniture	1972	44,179	76.8	7.6	10.7	---	4.7	.2
	1967	46,658	77.8	5.5	6.6	---	10.0	.1
11. Furniture & Fixtures	1972	8,162	37.1	39.9	20.5	.8	.3	1.4
	1967	4,961	32.6	49.2	12.3	.2	3.3	2.4
12. Stone Clay & Glass Products	1972	34,242	45.4	36.6	11.3	---	6.1	.6
	1967	26,287	52.1	30.9	9.7	---	7.1	.2
13. Primary Iron & Steel Products	1972	38,953	51.6	35.9	4.8	---	7.3	.4
	1967	40,438	58.8	24.6	3.5	---	13.0	.1
14. Primary Nonferrous Metal Products	1972	16,414	67.3	23.4	7.7	---	1.1	.5
	1967	13,410	67.7	26.1	4.5	.2	1.1	.4
15. Fabricated Metal Products	1972	7,317	23.3	60.1	13.0	.4	2.1	1.1
	1967	6,098	34.9	49.0	13.1	.3	1.7	1.0
16. Metal Cans & Products	1972	8,801	50.5	40.3	7.1	.6	.8	.7
	1967	6,148	34.7	50.2	11.3	.8	2.1	.9
17. Industrial Machinery, Except Electrical	1972	4,318	12.3	75.8	8.9	1.2	.1	1.7
	1967	4,145	26.8	57.1	8.4	1.5	.6	5.6
18. Machinery, Except Electrical & Industrial	1972	9,724	37.7	49.8	8.9	1.3	.6	1.7
	1967	9,126	44.4	45.0	7.6	.5	.9	1.6
19. Communications Products & Parts	1972	1,443	18.0	59.9	5.6	12.0	.3	4.2
	1967	1,577	30.8	55.6	3.6	4.9	.9	4.2
20. Electrical Products & Supplies	1972	7,514	43.1	45.9	8.4	.8	.5	1.3
	1967	7,208	46.7	42.7	7.1	.5	.9	2.1
21. Motor Vehicles & Equipment	1972	30,263	80.8	17.4	1.0	.1	.2	.5
	1967	14,944	75.8	21.0	1.7	.3	.9	.3
22. Transportation Equipment, Except Motor Vehicles	1972	2,613	24.0	30.3	43.0	1.3	.3	1.1
	1967	2,680	47.4	33.4	16.8	1.4	.3	.7
23. Instruments, Photo Equipment, Watches & Clocks	1972	1,183	34.4	54.0	5.7	3.6	.3	2.1
	1967	893	25.6	62.7	2.9	3.4	.5	4.9

o Straight-line ton-miles (see source data).
@ Excludes pipeline shipments.
* Excludes Petroleum & Coal Products from the 24 shipper groups surveyed by Bureau of Census.
\# Detailed 1963 data shown in 12th Edition, pp. 12-13.

see source data page A-7

SHIPMENTS BY MANUFACTURING ESTABLISHMENTS

Per Cent Distribution of Intercity Tons by Means of Transport
(For Years 1972 and 1967)

	Survey Year	Tons (Thousands)	Means of Transport--Per Cent					
			Rail	Truck		Air	Water	Other@/ Unknown
				For-Hire	Private			
Totals for 23 Shipper Groups*	1972	1,119,629	38.7	35.8	21.3	---	3.7	.5
	1967	966,957	44.6	33.5	17.6	---	3.9	.4
	1963#	882,526	43.9	32.9	19.9	---	2.6	.7
1. Meat & Dairy Products	1972	42,616	18.8	41.7	39.1	---	.1	.3
	1967	38,675	30.2	32.4	36.6	---	.2	.6
2. Canned, Frozen & Other Food Products	1972	154,015	50.7	20.3	23.0	---	5.5	.5
	1967	155,371	56.1	19.1	21.8	---	2.8	.2
3. Candy, Beverages & Tobacco Products	1972	57,996	15.4	25.7	58.5	---	.2	.2
	1967	40,327	30.2	29.6	39.2	---	.4	.6
4. Textile Mill & Leather Products	1972	14,209	9.7	61.4	27.7	.1	---	1.1
	1967	14,495	9.1	59.8	29.8	.1	.3	.9
5. Apparel & Related Products	1972	5,798	8.5	69.4	15.6	2.0	---	4.5
	1967	4,514	11.4	64.1	17.3	.8	---	6.4
6. Paper & Allied Products	1972	89,410	51.8	28.0	17.9	---	2.1	.2
	1967	71,677	55.5	27.7	15.1	---	1.4	.3
7. Chemicals, Plastics, Synthetic Rubber & Fibers	1972	111,853	48.6	30.1	12.1	---	8.6	.6
	1967	97,619	52.4	26.4	9.4	---	11.3	.5
8. Drugs, Paints & Other Chemical Products	1972	58,902	37.8	38.6	15.7	---	7.4	.5
	1967	61,169	36.7	34.9	18.9	.1	9.1	.3
9. Rubber & Plastic Prods.	1972	15,877	24.4	59.2	15.2	.7	---	.5
	1967	10,057	25.5	63.5	9.2	.3	.2	1.3
10. Lumber & Wood Products, Except Furniture	1972	79,991	45.9	16.2	36.3	---	1.3	.3
	1967	61,859	53.5	13.4	28.0	---	5.0	.1
11. Furniture & Fixtures	1972	14,371	22.0	41.4	34.7	.3	.2	1.4
	1967	8,712	20.5	53.2	23.4	.1	.9	1.9
12. Stone, Clay & Glass Products	1972	178,122	21.9	47.2	23.7	---	6.4	.8
	1967	134,313	35.7	44.5	17.7	---	1.8	.3
13. Primary Iron & Steel Products	1972	139,461	43.7	44.4	6.7	---	4.8	.4
	1967	128,975	50.3	37.7	5.2	---	6.7	.1
14. Primary Nonferrous Metal Products	1972	29,954	51.6	31.4	15.1	---	1.5	.4
	1967	22,776	48.4	37.0	12.5	.1	1.6	.4
15. Fabricated Metal Products	1972	14,870	17.3	55.3	25.1	.2	1.3	.8
	1967	16,668	23.0	44.6	29.8	.1	1.7	.8
16. Metal Cans & Products	1972	23,695	36.8	44.1	17.8	.3	.3	.7
	1967	18,408	21.3	56.2	20.5	.3	.6	1.1
17. Industrial Machinery, Except Electrical	1972	8,699	19.6	59.5	18.9	.6	.1	1.3
	1967	6,703	17.2	65.7	11.1	.8	.3	4.9
18. Machinery, Except Electrical & Industrial	1972	16,222	26.5	53.5	17.7	.6	.2	1.5
	1967	15,820	32.1	52.3	13.9	.3	.2	1.2
19. Communications Products & Parts	1972	2,327	13.0	64.6	12.4	6.1	---	3.9
	1967	2,514	21.2	63.8	9.4	2.6	.3	2.7
20. Electrical Products & Supplies	1972	13,131	35.1	49.5	14.1	.4	---	.9
	1967	12,115	34.8	50.9	12.0	.3	.2	1.8
21. Motor Vehicles & Equipment	1972	39,990	59.3	37.3	3.0	---	---	.4
	1967	36,525	57.6	36.9	4.9	.2	.1	.3
22. Transportation Equipment, Except Motor Vehicles	1972	6,506	19.5	23.9	54.8	.4	.4	1.0
	1967	6,159	44.3	37.2	16.5	.8	.7	.5
23. Instruments, Photo Equipment, Watches & Clocks	1972	1,603	20.9	63.8	10.9	2.0	.1	2.3
	1967	1,506	13.5	71.1	9.3	1.9	.4	3.8

@ Excludes pipeline shipments.
* Excludes Petroleum & Coal Products from the 24 shipper groups surveyed by Bureau of Census.
# Detailed 1963 data shown in 12th Edition, pp. 12-13.

see source data page A-8

AVERAGE LENGTH OF FREIGHT HAUL IN DOMESTIC COMMERCE

(In Statute Miles)

Year	Air Carriers - Scheduled 1/	Oil Pipeline 2/		Railroad 3/		Truck 4/	WATER		
		Crude	Product	U.S. as a system	Per carrier	Class 1 Common Carrier	Rivers & Canals 5/	Great Lakes 5/	Domestic Deep Sea 5/
1939	n/a	n/a	n/a	351	194	219	n/a	n/a	n/a
1940	n/a	254	249	351	193	236	n/a	n/a	n/a
1947	n/a	259	292	408	216	200	n/a	n/a	n/a
1948	635	264	304	406	214	216	n/a	n/a	n/a
1949	636	283	306r	412	218	238	n/a	n/a	n/a
1950	720	292	296	416	218	235	n/a	n/a	n/a
1951	748	297	302	420	221	237	n/a	n/a	n/a
1952	797	291	322	427	223	240	n/a	n/a	n/a
1953	786	291	317	421	221	242	n/a	n/a	n/a
1954	779	304	301	432	228	233	n/a	n/a	n/a
1955	894	302	286	431	228	235	256	568	1,579
1956	953	306	286	428	228	230	274	540	1,491
1957	1,018	305	283	429	231	267	281	554	1,527
1958	943	307	278	445	239	270	280	469	1,515
1959	945	323	270	448	239	273	280	518	1,528
1960	953	316	271	442	239	272	282	522	1,496
1961	906	320	266	452	245	267	287	488	1,508
1962	867	311	263	461	248	263	284	486	1,474
1963	905	314	261	464	251	267	285	482	1,478
1964	940	308	280	466	252	256	285	484	1,516
1965	943	320	335	477	257	259	297	494	1,501
1966	961	323	351	484	262	263	301	496	1,472
1967	993	311	396	485	262	256	322	487	1,446
1968	993	297	372	495	270	258	324	498	1,421
1969	1,147	297	366	497	273	261	313	513	1,389
1970	1,014	300	357	490	276	263	330	506	1,509
1971	1,023	301	347	507	284	277	337	499	1,483
1972	992	299	347	511	288	280	350	504	1,449
1973	1,022	301	340	531	298	276	342	535	1,384
1974	1,050	302	345	527	296	280	359	540	1,383
1975	1,082	288	366	516r	294r	286	358	530	1,362
1976	1,075	276	343	540	303r	290	376	535	1,367
1977	1,086			549r	315r	300	382	481	1,385
1978	1,115			607r	373	301	392	535	1,770

\# These figures do not include any allowance for the additional mileage due to the circuity of the mode.

1/ All certificated airlines.

2/ All oil pipelines subject to ICC/FERC regulation.

3/ All operating line-haul railroads.

4/ Class I intercity common carriers (see source data).

5/ Includes traffic as defined for "Intercity Freight By Modes", page 8 (parenthetical figures).

n/a Not available.

r Revised.

Note: For Passenger Length of Haul see page 15.

see source data page A-8

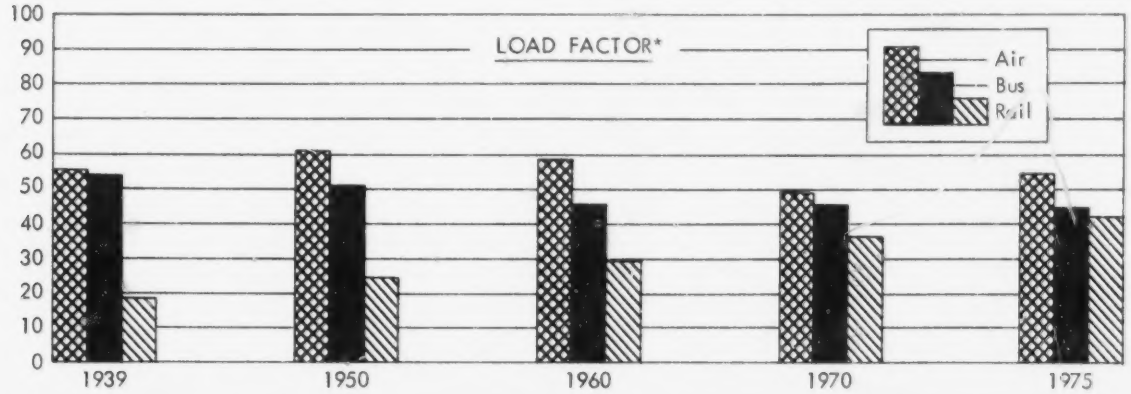
AVERAGE LOAD, CAPACITY, LOAD FACTOR AND LENGTH OF HAUL OF CLASS 1 INTERCITY CARRIERS OF PASSENGERS

	1947	1950	1955	1960	1965	1970	1975	1978	1979
LOAD									
Average No. Passengers (per unit)									
Air	19.5	22.7	32.6	38.3	48.8	54.0	71.2	85.4	87.9
Bus	19.6	18.2	18.4	17.9	19.2	19.1	19.3	19.9r	20.6
Rail	21.0	17.0	17.8	19.4	23.2	25.7	35.2	39.3r	44.1
Total Passenger-Miles (millions)									
Air	6,105	8,029	19,852	30,557	51,888	104,156	131,728	182,669	208,856
Bus	20,982	17,030	14,629	13,116	15,913	14,173	13,200	12,000r	12,900
Rail	45,921	31,760	28,526	21,258	17,338	10,740	9,935	10,222r	11,306
CAPACITY									
Average No. of Seats (per unit)									
Air	29.9	37.1	51.5	65.4	89.2	110.4	130.4	140.0	140.0
Bus	34.3	35.9	39.1	39.5	39.8	41.5	43.0	42.5r	42.5
Rail	70.0	69.0	66.0	65.0	68.0	70.0	83.0	83.0r	83.0
Total Seat-Miles (millions)									
Air	9,364	13,125	31,371	52,220	94,787	212,944	241,282	299,542	332,721
Bus	36,746	33,590	31,059	29,375	32,807	30,811	29,399	25,696r	26,598
Rail	153,300	129,030	105,600	71,409	50,818	29,253	23,441	21,588r	21,279
LOAD FACTOR*									
Air	65.2	61.2	63.3	58.6	54.7	48.9	54.6	61.0	62.8
Bus	57.1	50.7	47.1	45.3	48.2	46.0	44.9	46.7r	48.5
Rail	30.0	24.6	27.0	29.8	34.1	36.7	42.4	47.3r	53.1
LENGTH OF HAUL (miles)									
Air	474	461	519	583	614	679	698	719	714
Bus	46	52	65	79	94	106	113	124r	125
Rail#	65	65	66	65	58	38	37	36	37

* Load Factor is the per cent of capacity utilized. It is determined by dividing either the average number of passengers per unit by the average number of seats per unit or by dividing the total passenger-miles by the total seat-miles.

\# Includes commutation, which was excluded prior to the 14th Edition.

r Revised.



see source data page A-8

POSTAL SERVICE PAYMENTS TO U.S. CARRIERS FOR TRANSPORT OF DOMESTIC MAIL

(In Millions of Dollars - By Fiscal Year)

	1947	1950	1955	1960	1965	1970	1975 @	1979 @
Rail								
1st Class	22.2	26.8	41.0	46.1	47.6	6.0		
4th Class	83.1	161.6	177.5	193.7	182.7	116.1		
Other *	46.1	57.4	78.7	101.5	101.1	62.7		
	151.4	245.8	297.2	341.3	331.4	184.8	135.0	107.3
	79.0%	80.4%	76.9%	72.5%	64.4%	35.0%	20.2%	13.1%
Highway								
1st Class	1.9	3.0	5.2	10.2	13.1	16.6		
4th Class	11.9	20.2	33.0	41.1	48.0	25.6		
Other *	7.8	9.9	15.0	25.3	34.8	130.8		
	21.6	33.1	53.2	76.6	95.9	173.0	314.0	438.6
	11.3%	10.8%	13.8%	16.3%	18.7%	32.8%	47.0%	53.4%
Water								
1st Class	- -	.1	.1	.2	.3	.4		
4th Class	1.0	1.7	1.5	1.9	2.5	2.1		
Other *	.5	.8	.9	1.6	2.0	2.5		
	1.5	2.6	2.5	3.7	4.8	5.0	3.0	6.5
	0.8%	0.9%	0.6%	0.8%	0.9%	0.9%	0.5%	0.8%
Air								
1st Class	- -	- -	2.5	3.7	6.9	48.5		
Air Mail	15.0+	13.0	15.6	16.6	21.9	15.4		
Air Parcel Post #	- -	8.0	10.9	16.5	27.3	52.4		
Other *	2.0	3.0	4.7	12.3	26.4	48.7		
	17.0	24.0	33.7	49.1	82.5	165.0	216.0	268.3
	8.9%	7.9%	8.7%	10.4%	16.0%	31.3%	32.3%	32.7%
TOTAL	191.5	305.5	386.6	470.7	514.6	527.8	668.0	820.7

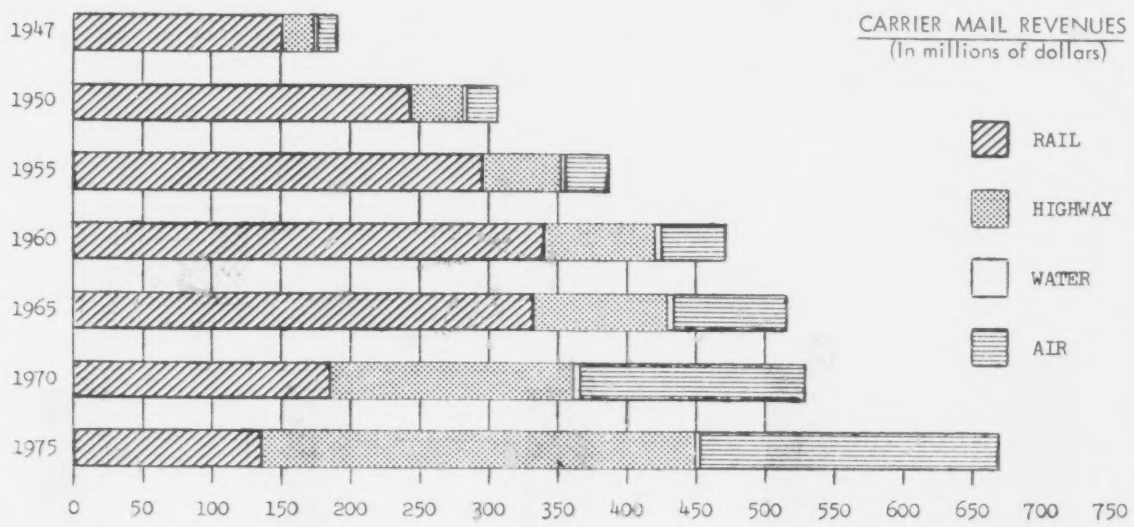
* Other includes Second Class, Third Class, Penalty, Franked, Free for the Blind, and Special Services.

\# Effective January 1968 renamed "Priority Mail" which is now all air mail or 1st Class mail 16 oz. or over.

\+ Separate accounting for Air Mail and Air Parcel Post was not made until 1949.

@ See source data for reason for lack of detail.

Note: See source data regarding amount of payments for transport of foreign mail.



see source data page A-9

see source data page A-10

PASSENGER FATALITIES IN TRANSPORT VEHICLES *

Year	DOMESTIC SCHEDULED AIR CARRIERS #		CLASS I INTERCITY BUS		RAIL		LOCAL TRANSIT	AUTO		MOTORCYCLE		WATER TRANSPORT	GENERAL AVIATION	
	Number	Rate@	Number	Rate@	Number	Rate@	Rate@ 1/	Number	Rate@	Number	Rate@	Number 2/	Number	Rate 3/
1947	199	3.15			75	.16	n/a	15,300	2.60	n/a	n/a	1,244	1,352	90.00
1948	83	1.32			52	.13	n/a	15,200	2.50	n/a/	n/a	1,364	1,384	94.17
1949	93	1.31			29	.08	n/a	17,700	2.70	n/a	n/a	1,484	896	79.36
1950	96	1.14			184	.58	n/a	20,200	2.90	n/a	n/a	1,502	871	82.05
1951	142	1.29			150	.43	.07	22,200	3.00	n/a	n/a	1,639	750	76.88
1952	46	.35			14	.04	.11	23,300	3.00	n/a	n/a	1,437	691	71.08
1953	86	.56			50	.16	.10	23,900	2.90	n/a	n/a	1,614	635	60.74
1954	16	.09			23	.08	.12	22,700	2.70	n/a	n/a	1,498	684	61.10
1955	156	.75			19	.07	.13	25,100	2.70	n/a	n/a	1,452	619	50.90
1956	143	.61	8	.05	57	.20	.11	26,600	2.70	n/a	n/a	1,508	669	50.87
1957	31	.11	16	.10	17	.07	.11	25,600	2.60	n/a	n/a	1,574	800	56.08
1958	114	.43	19	.12	62	.27	.08	24,100	2.30	n/a	n/a	1,653	717	43.18
1959	209	.68	20	.13	12	.05	.15	24,800	2.30	n/a	n/a	1,595	823	47.95
1960	297	.93	8	.05	33	.16	.02	24,800	2.20	731	n/a	1,478	787	44.49
1961	124	.38	14	.09	20	.10	.09	24,700	2.10	697	n/a	1,480	761	40.96
1962	121	.34	17	.10	28	.14	.04	26,800	2.20	759	n/a	1,445	857	43.62
1963	48	.12	38	.21	13	.07	.12	28,900	2.30	882	n/a	1,416	893	43.59
1964	63	.14	19	.10	9	.05	.09	31,500	2.40	1,118	n/a	1,464	1,056	48.42
1965	205	.38	44	.23	12	.07	.03	32,500	2.40	1,515	n/a	1,493	1,029	40.16
1966	59	.09	13	.07	27	.16	.07	34,800	2.50	2,043	n/a	1,630	1,151	34.50
1967	226	.29	23	.11	13	.09	.06	34,800	2.40	1,971	23.0	1,545	1,333	38.75
1968	258	.28	31	.16	13	.10	.10	36,200	2.40	1,900	23.0	1,625	1,399	37.81
1969	132	.13	8	.05	9	.07	.10	36,800	2.30	1,960	22.0	1,743	1,495	38.07
1970	0	.00	2	.01	10	.09	.13	34,800	2.10	2,330	23.0	1,651	1,310	40.85
1971	174	.16	15	.09	17	.24	.05	34,200	1.90	2,410	20.0	1,531	1,355	43.11
1972	160	.13	29	.17	48	.53	.16	35,200	1.90	2,700	17.0	1,568	1,426	41.94
1973	128	.10	29	.16	6	.07	.05	33,700	1.70	3,130	16.0	1,725	1,412	37.87
1974	158	.12	12	.06	7	.07	n/a	26,800	1.50	3,160	14.0	1,579	1,438	35.58
1975	113	.08	3	.02	8	.08	.07	27,200	1.40	2,800	11.0	1,570	1,345	31.73
1976	1r	.001	2	.01	5	.05	.09	27,650	1.34	3,000	16.0	1,371	1,320	29.49
1977	64	.04	6	.04	4	.04	.05	28,250	1.35	3,870	17.0	1,357r	1,436	30.00
1978	13	.01	2	.01	13	.13r	.02	28,450	1.30	4,530	20.0	1,321	1,459r	37.03r
1979	321	.12			7								1,311	32.86

\# Supplemental Air Carrier no longer shown. See 15th Edition for such data through 1978.

* Excludes crew members on public carriers, non-passengers killed by transport vehicles, and aircraft passenger deaths resulting from dynamite/sabotage accidents.

1/ Number of "local Transit" deaths not shown because source only publishes the rate.

2/ Includes passenger and crew deaths from all causes aboard vessels of all sizes, the majority of which occurred aboard small pleasure craft.

3/ Fatality rate per 100 million plane-miles (See note in Source Data).

@ Fatality rate per 100 million Passenger Miles.

r Revised.

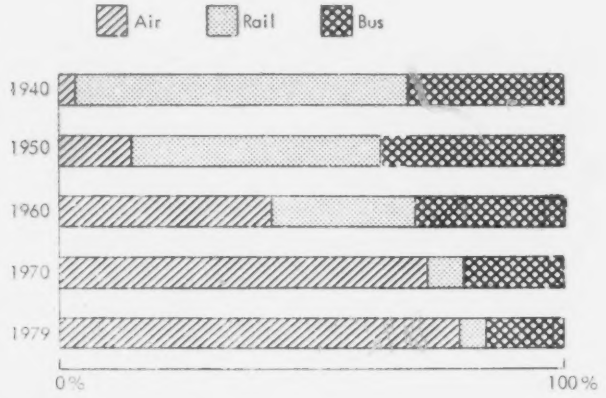
INTERCITY TRAVEL BY MODES
(Billions of Passenger-Miles)

Year	TOTAL Amount	%	PRIVATE CARRIER Auto Amount	%	Air Amount	%	Total Amount	%	PUBLIC CARRIER Air * Amount	%	Bus Amount	%	Rail@ Amount	%	Total Amount	%
1939	309.5	100	275.4	89.0	.1		275.5	89.0	.8	.3	9.5	3.1	23.7	7.7	34.0	11.0
1940	329.0	100	292.7	89.0	.1		292.8	89.0	1.2	.4	10.2	3.1	24.8	7.5	36.2	11.0
1941	369.9	100	324.0	87.6	.1		324.1	87.6	1.7	.5	13.5	3.6	30.6	8.3	45.8	12.4
1942	322.3	100	244.1	75.7	.1		244.2	75.8	1.7	.5	21.3	6.6	55.1	17.1	78.1	24.2
1943	293.8	100	176.0	59.9			176.0	59.9	2.0	.7	25.9	8.8	89.9	30.6	117.8	40.1
1944	309.3	100	181.4	58.6			181.4	58.6	2.9	.9	27.3	8.8	97.7	31.6	127.9	41.4
1945	345.5	100	220.3	63.8			220.3	63.8	4.3	1.2	27.4	7.9	93.5	27.1	125.2	36.2
1946	424.7	100	324.0	76.3	.3		324.3	76.4	7.2	1.7	26.9	6.3	66.3	15.6	100.4	23.6
1947	427.1	100	347.8	81.4	.6	.1	348.4	81.6	7.1	1.7	24.8	5.8	46.8	11.0	78.7	18.4
1948	439.0	100	365.0	83.1	.7	.2	365.7	83.3	6.8	1.5	24.6	5.6	41.9	9.5	73.3	16.7
1949	478.0	100	409.4	85.6	.8	.2	410.2	85.8	7.8	1.6	24.0	5.0	36.0	7.5	67.8	14.2
1950	503.6	100	438.3	87.0	.8	.2	439.1	87.2	9.3	1.8	22.7	4.5	32.5	6.5	64.5	12.8
1951	569.9	100	498.1	87.4	.9	.2	499.0	87.6	12.0	2.1	23.6	4.1	35.3	6.2	70.9	12.4
1952	612.9	100	539.2	88.0	1.0	.2	540.2	88.1	13.3	2.2	24.7	4.0	34.7	5.7	72.7	11.9
1953	649.9	100	575.8	88.6	1.2	.2	577.0	88.8	16.2	2.5	24.4	3.8	32.3	5.0	72.9	11.2
1954	668.2	100	597.1	89.4	1.4	.2	598.5	89.6	18.2	2.7	22.0	3.3	29.5	4.4	69.7	10.4
1955	710.8	100	637.4	89.7	1.5	.2	638.9	89.9	21.3	3.0	21.9	3.1	28.7	4.0	71.9	10.1
1956	745.5	100	669.7	89.8	1.6	.2	671.3	90.0	23.9	3.2	21.7	2.9	28.6	3.8	74.2	10.0
1957	746.4	100	670.5	89.8	1.8	.2	672.3	90.1	26.3	3.5	21.5	2.9	26.3	3.5	74.1	9.9
1958	757.8	100	684.9	90.4	2.1	.3	687.0	90.7	26.4	3.5	20.8	2.7	23.6	3.1	70.8	9.3
1959	762.8	100	687.4	90.1	2.1	.3	689.5	90.4	30.5	4.0	20.4	2.7	22.4	2.9	73.3	9.6
1960	781.0	100	706.1	90.4	2.3	.3	708.4	90.7	31.7	4.1	19.3	2.5	21.6	2.8	72.6	9.3
1961	789.0	100	713.6	90.4	2.3	.3	715.9	90.7	32.3	4.1	20.3	2.6	20.5	2.6	73.1	9.3
1962	815.4	100	735.9	90.3	2.7	.3	738.6	90.6	34.8	4.3	21.8	2.7	20.2	2.5	76.8	9.4
1963	849.8	100	765.9	90.1	3.4	.4	769.3	90.5	39.4	4.6	22.5	2.6	18.6	2.2	80.5	9.5
1964	892.7	100	801.8	89.8	3.7	.4	805.5	90.2	45.5	5.1	23.3	2.6	18.4	2.1	87.2	9.8
1965	917.2	100	817.7	89.2	4.4	.5	822.1	89.6	53.7	5.9	23.8	2.6	17.6	1.9	95.1	10.4
1966	967.7	100	856.4	88.5	5.7	.6	862.1	89.1	63.7	6.6	24.6	2.5	17.3	1.8	105.6	10.9
1967	1,017.2	100	889.8	87.5	7.0	.7	896.8	88.2	80.2	7.9	24.9	2.4	15.3	1.5	120.4	11.8
1968	1,075.4	100	936.4	87.1	8.2	.8	944.6	87.8	93.0	8.6	24.5	2.3	13.3	1.2	130.8	12.2
1969	1,134.1	100	977.0	86.1	8.8	.8	985.8	86.9	111.1	9.8	24.9	2.2	12.3	1.1	148.3	13.1
1970	1,180.8	100	1,026.0	86.9	9.1	.8	1,035.1	87.7	109.5	9.3	25.3	2.1	10.9	.9	145.7	12.3
1971	1,225.3	100	1,071.0	87.4	9.2	.8	1,080.2	88.2	110.7	9.0	25.5	2.1	8.9	.7	145.1	11.8
1972	1,296.3	100	1,129.0	87.1	10.0	.8	1,139.0	87.9	123.0	9.5	25.6	1.9	8.7	.7	157.3	12.1
1973	1,345.1	100	1,166.3	86.7	10.7	.8	1,177.0	87.5	132.4	9.8	26.4	2.0	9.3	.7	168.1	12.5
1974	1,255.5r	100	1,070.7	85.3	11.2r	.9	1,081.9r	86.2	135.4	10.8	27.7	2.2	10.5	0.8	173.6	13.8
1975	1,307.0r	100	1,123.2	85.9	11.4r	.9r	1,134.6r	86.8	136.9	10.5	25.4	1.9	10.1	0.8	172.4	13.2
1976	1,415.4r	100	1,215.4r	85.9	12.1r	.8	1,227.5r	86.7	152.3	10.8	25.1	1.8	10.5r	0.7	187.9	13.3
1977	1,461.3r	100	1,248.2r	85.4	12.8r	.9r	1,261.0r	86.3r	164.2	11.2r	25.7	1.8	10.4	0.7	200.3	13.7r
1978	1,555.3r	100	1,316.9r	84.7r	13.4r	.9r	1,330.3r	85.5r	189.1	12.2r	25.4	1.6	10.5	0.7	225.0	14.5r
1979	1,553.7	100	1,287.9	82.9	14.1	.9	1,302.0	83.8	213.5	13.7	26.6	1.7	11.6	0.8	251.7	16.2

@ Includes commutation, which represents about 44% of total.
* Revision in series from 1969 (see source data.)
r Revised.

MODAL DISTRIBUTION OF TOTAL INTERCITY TRAVEL

MODAL DISTRIBUTION OF INTERCITY TRAVEL BY PUBLIC CARRIER



see source data page A-10

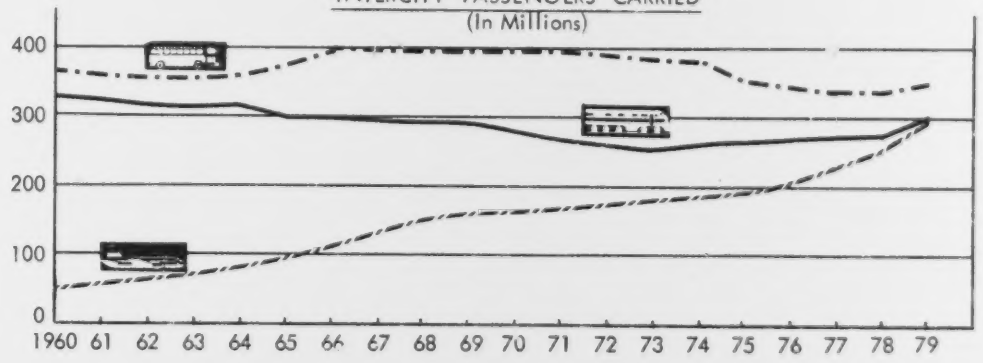
see source data page A-11

INTERCITY PASSENGERS CARRIED
(In Millions)

Year	Air (Domestic Certificated) Passengers	Index	% of Total	Bus * Passengers	Index	% of Total	Rail (Class 1) ** Passengers	Index	% of Total	Total Passengers	Index
1939	1.9			132.6			450.4			584.9	
1940	3.0			140.9			452.9			596.8	
1945	7.1			481.9			891.1			1,380.1	
1950	18.9			338.5			486.2			843.6	
1955	41.3			237.8			432.0			711.1	
1960	56.8	100	7.6	366.0	100	48.9	325.9	100	43.5	748.7	100
1965	92.7	163	12.0	378.0	103	49.1	298.7	92	38.8	769.4	103
1970	155.0	273	18.5	401.0	110	47.7	283.9	87	33.8	839.9	112
1971	158.1	278	19.1	395.0	108	47.8	272.8	84	33.0	825.9	110
1972	174.4	307	21.1	393.0	107	47.4	261.1	80	31.5	828.5	111
1973	185.4	326	22.6	381.0	104	46.4	254.5	78	31.0	820.9	110
1974	191.7	338	22.5	386.0	105	45.3	274.2	84	32.2	851.9	114
1975	191.1	336	23.5	351.0	96	43.3	269.4	83	33.2	811.5	108
1976	209.6	369	25.5	340.0	93	41.4	271.7	83	33.1	821.3	110
1977	225.9	398	27.1	332.0	91	39.9	275.3	84r	33.0	833.2	111
1978	257.0	452	29.4	335.0	92	38.4	281.0r	86	32.2	873.0r	117r
1979	295.1	520	31.2	350.0	96	37.0	301.3	92	31.8	946.4	126

\# Based on count of each person boarding a public carrier; a round trip by one person would be counted as at least two passengers.
* See source data for break in series after 1959.
** Includes commutation, which represents about 72% of total.
r Revised.

INTERCITY PASSENGERS CARRIED
(In Millions)



TRAVEL BY U.S. RESIDENTS

Number of Person-Trips* -- Population of U.S.
(In Millions)

	1957@	1963@	1967@	1967#	1972#	1977
Number of Person-Trips	346	487	361	253	458	539
Population of U.S.	172	189	199	199	209	217
Trips Per Person	2.01	2.57	1.81	1.27	2.19	2.48

Percentage Distribution of Person-Trips by Means of Transport and by Reason for Trip

Means of Transport

	1957@	1963@	1967@	1967#	1972#	1977
Auto	87%	89%	86%	82%	85%	82%
Bus	2%	3%	3%	3%	2%	3%
Air	3%	4%	8%	11%	12%	12%
Rail	4%	2%	1%	2%	- - -	1%
Other	4%	2%	2%	2%	1%	2%
	100%	100%	100%	100%	100%	100%

Reason for Trip

	1957@	1963@	1967@	1967#	1972#	1977
Business	19%	14%	16%	19%	20%	20%
Visit Friends & Relatives	46%	46%	42%	41%	39%	37%
Other Pleasure	27%	26%	30%	25%	25%	26%
Other	8%	14%	12%	15%	16%	17%
	100%	100%	100%	100%	100%	100%

Percentage Distribution of Person-Trips by Distance of Trip+
(Percentage by Automobile and by Public Transport)

	1957			1963			1967		
	Person-Trips	Percent by Auto	Percent by Public Transport	Person-Trips	Percent by Auto	Percent by Public Transport	Person-Trips@	Percent by Auto	Percent by Public Transport
100 - 199 Miles	50%	89%	11%	53%	93%	7%	47%	94%	6%
200 - 499 Miles	31%	81%	19%	30%	82%	18%	29%	81%	19%
500 - 999 Miles	10%	69%	31%	13%	56%	44%	9%	62%	38%
1,000 Miles or More	7%	n/a	n/a				9%	56%	44%
Outside Continental U.S.	2%	n/a	n/a	4%	58%	42%	6%	64%	36%
	100%			100%			100%		

	1972			1977
	Person-Trips	Percent by Auto	Percent by Public Transport	Person-Trips
200 - 399 Miles	42%	97%	3%	39%
400 - 599 Miles	20%	93%	7%	23%
600 - 799 Miles	10%	88%	12%	9%
800 - 999 Miles	5%	77%	23%	5%
1,000 Miles or More	19%	63%	37%	20%
Outside Continental U.S.	4%	49%	51%	4%
	100%			100%

* A "Person-Trip" is a round trip by one person from home to a destination and return home.
@/The 1963 and 1967 surveys defined a "Trip" as"each time a person goes to a place at least 100 miles away from home in one day or is out of town one or more nights." Figures shown for 1957 and 1963 have been adjusted from the published figures to make them more nearly compatible with the parameters of the 1967 survey which are shown herein.
The 1972 survey defines a "Trip" as "each time a person goes to a place at least 100 miles away from home and returns." This omits all travel under 100 miles regardless of whether nights were spent away from home. These 1967 and 1972 figures are from the 1972 survey and should be comparable.
+ Trip distance parameters for the several surveys differ as is shown in this table.

see source data page A-11

OVERSEAS TRAVEL BY U.S. RESIDENTS

Number of Overseas Travelers
(Thousands)

	1960	%	1965	%	1970	%	1975	%	1978	%	1979	%
Air	1,317	73	2,386	81	5,140	88	6,318	89	7,763		7,810	
Sea	317	18	237	8	120	2	36	*	27		25	
Ocean Cruise	160	9	333	11	560	10	755	11	NA		NA	
Total	1,794	100	2,956	100	5,820	100	7,109	100				

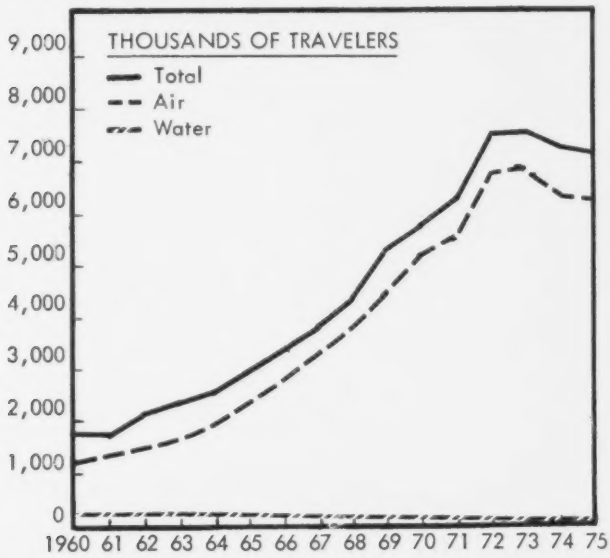
Total Expenditures for Overseas Travel
(Millions of Dollars)

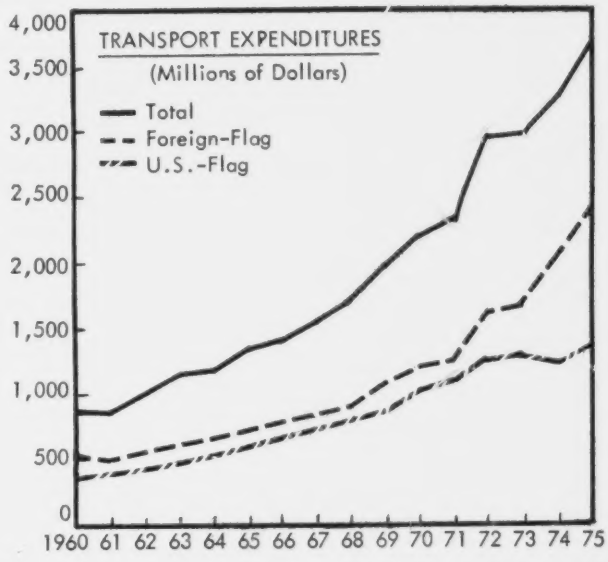
Transoceanic Transportation	865	46	1,330	51	2,200	50	3,726	52	4,680	49	5,161	49
Expenditures Overseas	1,000	54	1,298	49	2,184	50	3,474	48	4,947r	51	5,354	51
Total	1,865	100	2,628	100	4,384	100	7,200	100	9,627r	100	10,515	100

Transoceanic Transportation Expenditures
(Millions of Dollars)

Foreign-Flag Carriers												
Air	288	33	454	34	970	44	1,985	54	#		#	
Sea	217	25	266	20	245	11	278	7	#		#	
Total	505	58	720	54	1,215	55	2,263	61	2,896r	62	3,100	60
U. S.-Flag Carriers												
Air	310	36	543	41	955	44	1,463	39	#		#	
Sea	50	6	67	5	30	1	*	*	#		#	
Total	360	42	610	46	985	45	1,463	39	1,784r	38	2,061	40
TOTAL Transoceanic Transportation	865	100	1,330	100	2,200	100	3,726	100	4,680	100	5,161	100

* Less than 1 percent.
r Revised.
\# Source data no longer differentiate between Air and Sea.





see source data page A-12

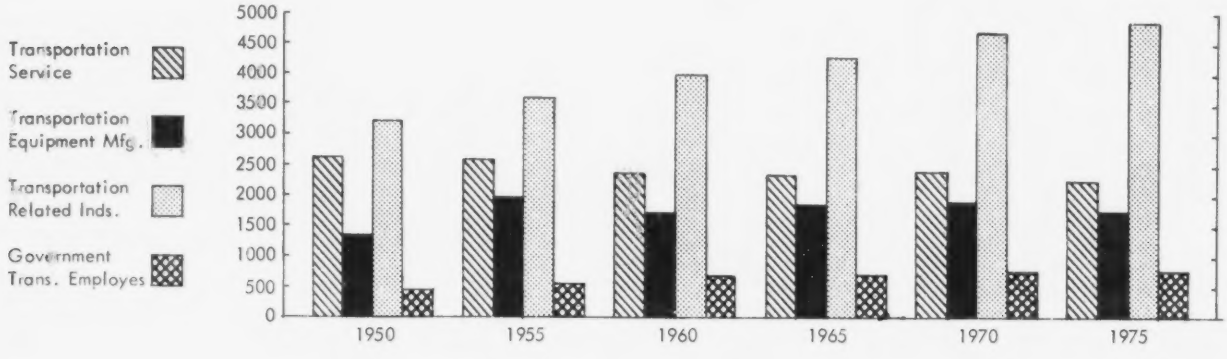
U. S. EMPLOYMENT IN TRANSPORTATION AND RELATED INDUSTRIES

(Number of Persons Employed)
(In Thousands)

Transportation Service	1950	1955	1960	1965	1970	1975	1978	1979
Air	86	128	191	229	351	362	396	423
Bus - Intercity & Rural	47	43	41	42	43	39	38	37
Local Transport	157	127	101	83	77	69	72	73
Railroads	1,391	1,205	885	735	627	538	535	546
Oil Pipe Line	29	27	23	20	18	17	19	19
Taxi	121	124	121	110	107	83	68	64
Trucking & Trucking Terminals	557	688	770	882	998	996	1,181	1,286
Water	237	237	232	230	215	190	207	225
Totals	2,625	2,579	2,364	2,331	2,436	2,294	2,516	2,673
Transportation Equipment Manufacturing								
Aircraft & Parts	283	761	646	624	669	514	529	605
Motor Vehicles & Equipment	926	1,010	829	945	914	892	1,103	983
Railroad Equipment	60	56	43	56	51	52	57	71
Ship & Boat Building & Repair	85	125	141	160	170	194	218	215
Other Transportation Equipment	25	37	33	57	111	115	157	157
Totals	1,379	1,989	1,692	1,842	1,915	1,767	2,064	2,031
Transportation Related Industries								
Automotive & Accessory Retail Dealers	652	735	807	902	996	1,076	1,134	1,154
Automotive Wholesalers	176	196	215	255	320	367	419	436
Automotive Services & Garages	161	188	251	324	384	400	518	570
Gasoline Service Stations	343	387	461	522	614	616	644	586
Highway & Street Construction	210	242	294	324	331	297	279	280
Petroleum	282	330	311	292	333	380	448	491
Other Industries:								
Truck Drivers & Deliverymen	1,131	1,275	1,418	1,387	1,356	1,325	1,307	1,300
Shipping & Receiving Clerks	260	253	240	300	359	419	455	466
Totals	3,215	3,606	3,997	4,306	4,693	4,880	5,204	5,283
Government Transportation Employees								
U.S. Department of Transportation*	18	16	38	45	66	75	74	74
Highway Employees - State & Local	380	475	532	571	607	604	583r	595e
Post Office	75	80	83	83	103	98	91	93
Other	18	17	18	16	12	13	13	13
Totals	491	588	671	715	788	790	761r	775
TOTAL TRANSPORTATION EMPLOYMENT	7,710	8,762	8,724	9,194	9,832	9,731	10,545r	10,762
TOTAL EMPLOYED CIVILIAN LABOR FORCE	58,920	62,171	65,778	71,088	78,627	84,783	94,373	96,945
PERCENT TRANSPORTATION OF TOTAL	13.1%	14.1%	13.3%	12.9%	12.5%	11.5%	11.2%	11.1%

* 1970 figures include all of DOT; prior years only include FAA.

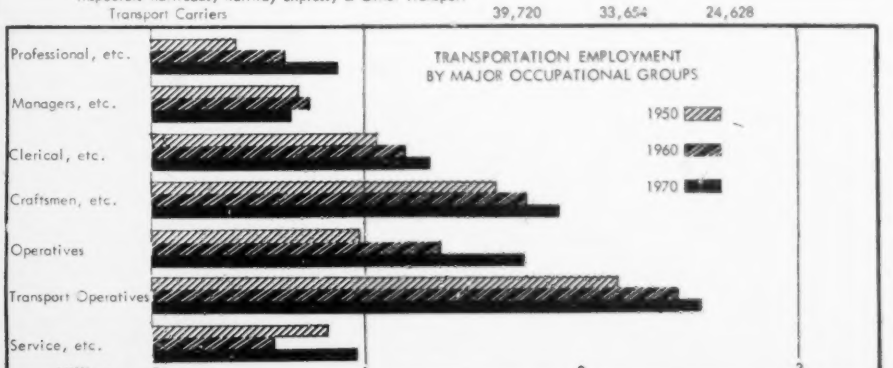
r Revised.
e Estimate.



see source data page A-12

U. S. EMPLOYMENT IN TRANSPORTATION BY OCCUPATION 1/

	1950	1960	1970
Professional, Technical, Sales & Kindred:			
Accountants & Auditors	37,470	40,543	49,263
Airplane Pilots	13,650	26,976	50,404
Air Traffic Controllers		10,735	25,304
Computer & Mathematical Specialists			21,173
Engineers	53,640	130,900	166,703
Engineering & Science Technicians			63,700
Flight Engineers		2,083	6,345
Personnel & Labor Relations	4,620	7,560	20,739
Sales Workers	220,350	285,167	327,484
Technicians	15,630	28,641	50,373
Other Professional, Technical & Kindred	37,140	70,834	66,205
Totals	382,500	603,439	847,693
Managers & Administrators:			
Auto Repair Services & Garages	83,790	60,155	
Buyers, Purchasing Agents & Sales Managers			59,345
Gasoline Service Stations	179,490	193,844	167,226
Motor Vehicles & Accessories-Retail	123,180	141,815	128,317
Motor Vehicles & Equipment-Wholesale	12,270	27,029	
Officers, Pilots, & Purser-Ship	38,010	27,901	24,673
Railroad Conductors	54,600	44,600	39,975
Transport Carrier Services	149,430	165,269	162,326
Transport Equipment Manufacturing	32,040	51,497	
Other Managers & Administrators			60,842
Totals	672,810	712,010	642,704
Clerical & Kindred Workers:			
Bookkeepers & Cashiers	97,650	123,437	164,594
Dispatchers & Starters-Vehicle	31,500	46,895	59,823
Office Machine Operators & Receptionists	25,140	38,184	48,404
Secretaries, Stenographers, & Typists	107,400	124,159	178,825
Shipping & Receiving Clerks	288,400	310,037	411,169
Stock Clerks & Storekeepers			56,337
Ticket, Station, & Express Agents	61,800	73,380	98,103
Other Clercial & Kindred	425,380	462,540	272,784
Totals	1,037,270	1,178,632	1,290,039
Craftsmen & Kindred Workers:			
Automobile Accessories Installers		9,278	6,766
Carpenters	40,620	41,384	44,480
Cranemen, Derrickmen, & Hoistmen	13,080	12,049	14,890
Electricians	40,290	50,766	54,289
Foremen, n.e.c.	123,630	143,545	192,870
Inspectors-Railroads, Railway Express, & Other Transport Transport Carriers	39,720	33,654	24,628
Locomotive Engineers	71,220	58,660	49,350
Locomotive Firemen	53,760	37,087	13,030
Machinists, Job Setters, & Toolmakers	149,070	144,848	126,008
Mechanics & Repairmen:			
Aircraft	70,560	112,098	140,316
Automobile & Automobile Body	642,780	663,632	914,315
Railroad & Car Shop	48,030	59,128	55,635
Metal Craftsmen	20,670	30,117	66,818
Painters, Plasterers, & Paperhangers	49,280	52,930	51,402
Plumbers & Pipefitters	18,210	23,925	28,732
Shipfitters		10,543	10,610
Stationary Engineers & Power Station Operators	18,090	19,940	10,686
Other Craftsmen & Kindred	192,660	221,287	137,047
Totals	1,591,670	1,724,871	1,941,872
Operatives, except Transport:			
Assemblers			214,816
Attendants - Auto Service & Parking	236,340	353,389	
Checkers, Examiners & Inspectors			92,501
Filers, Polishers, Sanders, & Buffers	38,280	33,456	18,600
Garage Workers & Gas Station Attendants		364,505	437,428
Operatives:			
Machine-Miscellaneous & Not Specified			109,730
Motor Vehicle & Motor Vehicle Equipment Mfgrs.		32,551	86,377
Other-Transportation Equipment Manufacturers		98,394	67,789
Other-Specified	586,210	334,169	476,243
Precision Machine Operators			71,552
Sailors & Deckhands	39,210	32,748	24,803
Welders & Flamecutters	64,740	89,505	112,088
Totals	964,780	1,338,717	1,711,927
Transport Equipment Operatives:			
Boatmen & Canalmen	7,950	4,957	4,969
Bus Drivers	153,030	181,794	236,127
Conductors & Motormen-Urban Rail	38,250	11,673	9,565
Deliverymen & Routemen	238,500	442,163	625,382
Railroad Brakemen	77,250	61,670	49,397
Railroad Switchmen	59,160	57,788	52,281
Taxicab Drivers & Shauffeurs	202,680	162,497	151,789
Truck Drivers	1,315,410	1,451,259	1,380,903
Other	34,650	33,410	30,863
Totals	2,126,880	2,407,211	2,541,276
Service Workers & Laborers:			
Airline Stewardesses		10,019	32,681
Cleaning Service Workers			74,564
Freight & Material Handlers		434,831	543,097
Guards & Watchmen			22,468
Laborers:			
Motor Vehicle & Motor Vehicle Equipment Mfgrs.		17,903	12,021
Other-Miscellaneous & Not Specified			87,620
Other-Specified			32,197
Other-Transportation Equipment Manufacturers		15,613	11,421
Longshoremen	53,910	55,780	43,176
Personal Service Workers			46,197
Teamsters	21,750	19,657	7,498
Other Service Workers 2/			36,875
Other Service Workers & Laborers 2/	732,900		
Totals	858,560	555,802	949,815
TOTAL U.S. EMPLOYED LABOR FORCE	59,642,990	64,639,256	77,308,792
TOTAL TRANSPORTATION EMPLOYMENT 3/	7,584,470	8,518,682	9,925,326
PERCENT TRANSPORTATION EMPLOYMENT	12.7	13.2	12.8

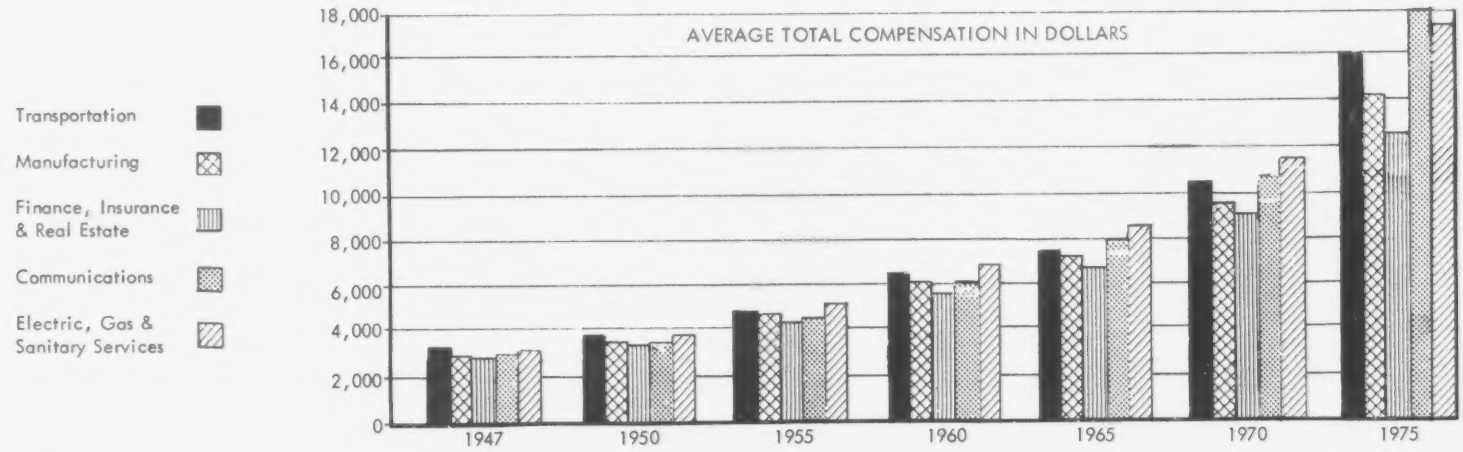


1/ Occupational titles were not the same in the three census. See Source Data Page A-20 for clarification.
2/ No equivalent title shown in 1960 and 1970. It is assumed more accurately distributed to higher titles.
3/ Totals are less than these on page 23 because of a different definitions of titles in the Labor Department statistics.

AVERAGE ANNUAL EARNINGS AND TOTAL COMPENSATION PER FULL-TIME EMPLOYE
(In Dollars)

	1947		1950		1955		1960		1965		1970		1975r		1977r		1978	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Transportation	3,169	3,392	3,641	3,881	4,623	4,965	5,836	6,398	6,994	7,735	9,391	10,601	13,596	15,993	16,016	19,122	17,318	20,745
Railroads	3,211	3,525	3,778	4,069	4,701	5,093	6,242	6,947	7,462	8,433	10,112	11,679	15,363	18,694	18,484	22,839	20,188	24,926
Local & Intercity Bus	3,020	3,131	3,293	3,463	4,140	4,399	4,880	5,253	5,550	6,075	6,875	7,684	9,299	10,861	10,553	12,549	11,204	13,426
Trucking & Warehousing	3,063	3,165	3,469	3,629	4,409	4,690	5,395	5,893	6,625	7,245	8,672	9,699	12,709	14,673	14,939	17,509	16,195	19,081
Water	3,748	3,902	3,698	3,867	5,122	5,463	6,203	6,784	7,388	8,112	10,283	11,424	14,247	16,308	17,192	19,989	18,615	21,713
Air (Common Carriers)	3,265	3,446	4,070	4,465	5,416	5,896	6,929	7,421	8,496	9,349	12,027	13,612	17,084	20,484	20,123	24,540	21,711	26,630
Oil Pipe Line	3,750	3,964	4,334	4,667	5,693	6,077	6,957	7,478	8,053	8,684	10,765	12,000	16,765	19,412	19,444	22,611	21,555	25,300
Allied Services	2,762	2,870	3,129	3,386	4,167	4,410	5,355	5,759	6,276	6,793	8,262	9,144	11,233	12,767	12,560	14,393	13,259	15,259
Manufacturing	2,793	2,927	3,331	3,549	4,482	4,855	5,548	6,147	6,566	7,351	8,381	9,575	11,903	14,180	13,866	16,835	14,918	18,219
Communications	2,673	2,908	3,180	3,502	4,338	4,725	5,531	6,146	6,820	8,060	8,752	10,856	13,726	18,149	16,697	22,566	18,379	24,988
Electric, Gas & Sanitary Services	2,957	3,193	3,556	3,883	4,782	5,288	6,147	6,920	7,476	8,551	10,023	11,703	14,056	17,175	16,779	20,846	18,060	22,553
Finance, Insurance & Real Estate	2,740	2,874	3,264	3,462	4,010	4,309	4,921	5,394	5,971	6,654	7,821	8,866	10,619	12,489	12,304	14,655	13,337	15,943
ALL INDUSTRY TOTAL	2,589	2,713	3,030	3,189	3,923	4,159	4,826	5,224	5,814	6,366	7,713	9,739	10,835	12,519	12,382	14,558	13.275	15,693

(a) Average annual earnings. (b) Average total annual compensation including value of supplemental benefits.



see source data page A-13

U. S. GOVERNMENT TRANSPORTATION RESEARCH, PLANNING, AND R&D OUTLAYS*

(Millions of Dollars)

	FISCAL YEARS					
	1960	1965	1970	1975	1979r	1980 est
General						
Dept. of Transportation (Commerce)	- -	2.0	8.1	33.3	13.2	13.6
Dept. of Agriculture	- -	5.9	9.0	11.6	12.5	12.9
Total	- -	7.9	17.1	44.9	25.7	26.5
Air						
FAA - Aviation	52.8	48.9	53.9	104.9	135.6	126.4
Supersonic Transport[1]/	- -	47.9	160.5	.4	- -	- -
NASA - Aircraft Technical	39.0	65.6	187.3	305.8	463.9	549.0
AEC - Aircraft Propulsion Reactors	62.8	- -	- -	- -	- -	- -
Total	154.6	162.4	401.7	411.1	599.5	675.4
Highway						
FHWA - Highways[2]/	- -	7.1	16.0	20.1	28.6	44.9
Safety	29.5	- -	14.0	21.8	42.5	47.1
Research/Planning Grants	- -	61.2	78.3	119.6	41.1	47.0
Total	29.5	68.3	108.3	161.5	112.2	139.0
Rail						
FRA - High-Speed Ground Trans. Prog.[3]/	- -	- -	16.0	- -	- -	- -
General Research	- -	- -	0.4	36.8	49.5	52.9
Safety[4]/	- -	- -	- -	6.2	- -	- -
Total	- -	- -	16.4	43.0	49.5	52.9
Urban Mass Transport						
HUD-DOT	- -	1.0	7.6	88.6	119.4	70.3
Water						
Maritime Administration	11.2	9.3	12.7	26.5	28.9	33.9
Coast Guard	- -	- -	10.1	16.6	21.1	22.0
AEC - Merchant Ship Reactors	7.5	2.0	- -	- -	- -	- -
Total	18.7	11.3	22.8	43.1	50.0	55.9
TOTAL TRANSPORTATION R&D	202.8	250.9	573.9	792.2	956.3	1,020.0
TOTAL U.S. GOVERNMENT R&D	7,774	14,889	15,632	19,525	26,578	30,477
TRANSPORT R&D AS % OF TOTAL R&D	2.6%	1.7%	3.7%	4.1%	3.6%	3.3%

* In terms of financial obligations as reported in "The Budget of the U.S. Government"

1/ Program discontinued by Congress in early 1971.

2/ Program transferred to safety and research accounts in 1975.

3/ Included in General Research since 1974.

4/ Included in General Research before 1974, after 1977.

r Revised.

see source data page A-13

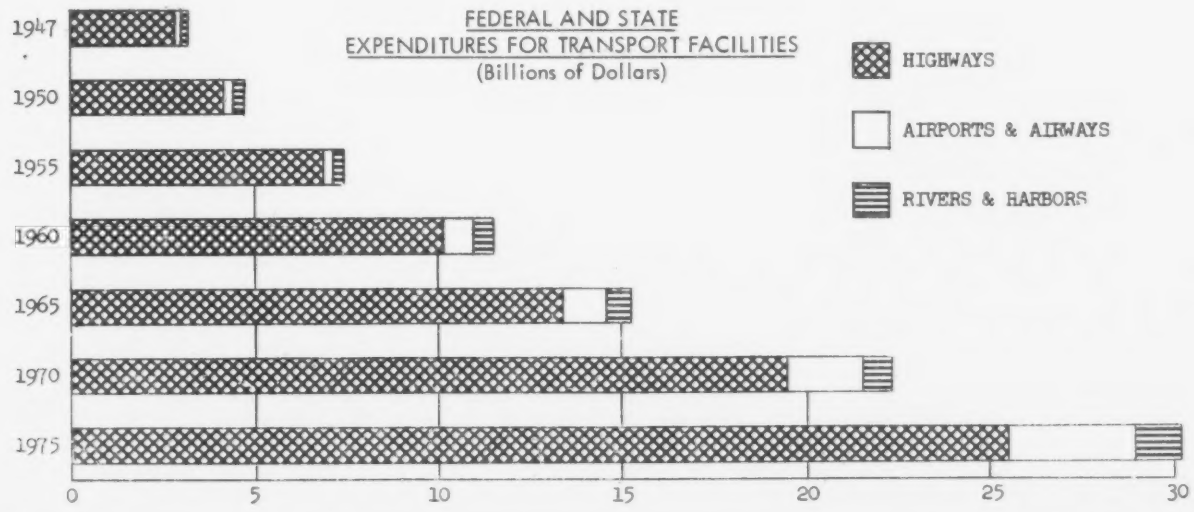
FEDERAL AND STATE EXPENDITURES FOR TRANSPORT FACILITIES

(In Millions of Dollars)

		Airways		Airports		Rivers & Harbors		Highways		Grand Total
1947	Federal	66		21		88		337		
	State & Local	--		71		96		2,529		
	Total		66		92		184		2,866	3,208
1950	Federal	115		44		189		503		
	State & Local	--		101		136		3,652		
	Total		115		145		325		4,155	4,740
1955	Federal	108		14		119		784		
	State & Local	--		114		154		6,157		
	Total		108		128		273		6,941	7,450
1960	Federal	429		79		287		2,753		
	State & Local	--		342		237		7,407		
	Total		429		421		524		10,160	11,534
1965	Federal	652		95		391		4,137		
	State & Local	--		415		276		9,319		
	Total		652		510		667		13,456	15,285
1970	Federal	965		111		376		5,181		
	State & Local	--		969		444		14,321		
	Total		965		1,080		820		19,502	22,367
1975	Federal	1,652		342		526		7,180		
	State & Local	--		1,448		742		20,027		
	Total		1,652		1,790		1,268		27,207	31,917
1978	Federal	1,869		620		834		8,088r		
	State & Local	- -		1,617		754		22,743r		
	Total		1,869		2,237		1,588		30,831r	36,525r
1979	Federal	1,850		617		988		9,596		
	State & Local	- -		NA		NA		24,389		
	Total		1,850						33,985	NA

Note: Amtrak, Urban & High-Speed Ground Transport Federal expenditures, in millions, not included above: 1965 - $11.1; 1970 - $117.8; 1975 - $1,052.3; 1976 - $1,676.5; 1977 - $2,438.9; 1978 - $2,743.5; 1979 - $3,237.0

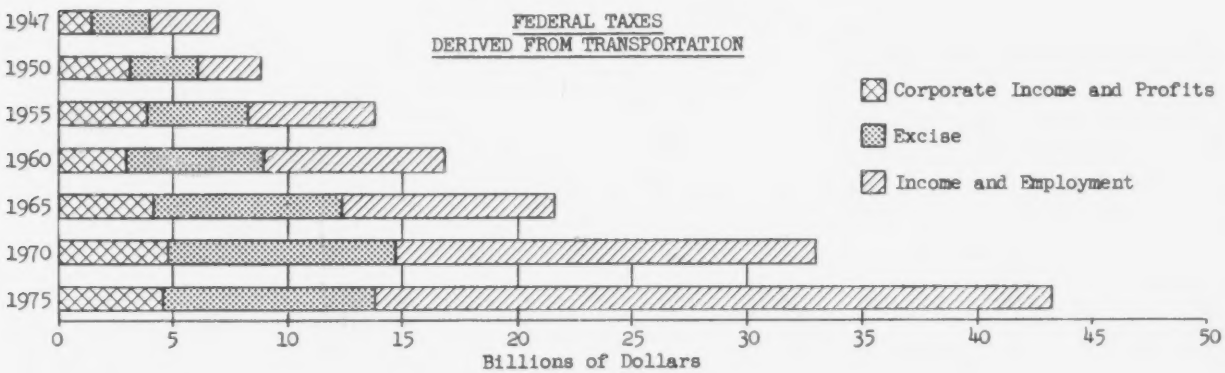
r Revised. p Preliminary. N/A Not available.



see source data page A-14

FEDERAL AND STATE TAXES DERIVED FROM TRANSPORTATION
(In Millions of Dollars)

FEDERAL TAXES	1947	1950	1955	1960	1965	1970	1975	1977	1978
Corporate Income/Profits Taxes									
Transportation Companies	509	862	809	684	779	788	1,470	1,507	
Transport Equip. Mfrs. exc. Motor	64	162	456	322	518	629	565	743	
Motor Vehicle and Equip. Mfrs.	559	1,799	2,434	1,729	2,591	2,927	1,697	4,223	
Auto Sales and Services	304	342	172	214	287	451	794	875	
Total	1,436	3,165	3,871	2,949	4,175	4,795	4,526	7,348	
Excise Taxes									
Gasoline	455	568	999	2,224	2,627	3,447	3,839	4,178	4,331
Diesel and Spe. Motor Fuels	- -	- -	25	82	151	265	363	453	488
Use Tax on Lge. Motor Veh.	- -	- -	- -	45	103	141	212	228	223
Lubricating Oil	47	45	43	47	48	57	57	65	62
Motor Veh., Parts and Acc.	438	781	1,595	1,781	2,439	2,439	495	805	1,041
Tires, Tubes & Tread Rubber	171	184	177	299	458	614	634	796	825
Transportation Property	293	340	431	2	- -	11	47	55	64
Transportation People	244	229	200	261	122	337	803	1,006	1,181
Other Excise Taxes*	885	1,088	1,431	1,794	2,262	2,448	2,477	2,800	2,677
Total	2,533	3,235	4,901	6,535	8,210	9,759	8,927	10,386	10,892
Income and Employment Taxes*	2,949	2,594	5,340	7,462	9,129	17,638	26,052	30,565	
TOTAL TRANSPORTATION TAXES	6,918	8,994	14,112	16,946	21,514	32,192	39,505	48,299	
TOTAL FEDERAL TAXES	39,108	38,957	66,289	91,775	114,435	195,722	293,823	358,100	
PERCENT TRANSPORT OF TOTAL	17.7%	23.1%	21.3%	18.5%	18.8%	16.4%	13.4%	13.5%	



STATE TAXES	1947	1950	1955	1960	1965	1970	1975	1977	1978
Corporate Income Taxes	64	171	156	153	308	374	657	1,124	
Excise Taxes									
Motor Fuels	1,115	1,544	2,353	3,335	4,300	6,283	8,255	9,088	9,501
Motor Veh. and Op Lic.	541	755	1,184	1,468	2,021	2,955	3,941	4,587	4,825
Other State Taxes*	424	530	841	1,253	1,766	4,765	4,593	5,803	6,328
Total	2,080	2,829	4,378	6,056	8,087	14,003	16,789	19,478	20,654
Individual Income Taxes*	58	95	154	294	472	1,625	2,164	2,881	
TOTAL TRANSPORTATION TAXES	2,202	3,095	4,688	6,503	8,867	16,002	19,610	23,483	
TOTAL STATE TAXES	6,745	7,929	11,597	18,036	26,126	47,961	80,155	101,085	
PERCENT TRANSPORT OF TOTAL	32.6%r	39.0%	40.4%	36.1%	33.9%	33.4%	24.5%	23.2%	

* Paid by people employed in transportation.

see source data page A-14

NET INVESTMENT IN PRIVATELY OWNED TRANSPORT EQUIPMENT AND FACILITIES

(In Millions of Dollars)

	1947	1950	1955	1960	1965	1970	1975	1976
Air Carrier								
Commercial	378	491	831	2,565	3,928	9,985	11,105	10,829
General	219	129	217	556	1,005	2,213	3,873	4,909
	597	620	1,048	3,121	4,933	12,198	14,978	15,738
Equipment Manufacturers								
Motor Vehicles & Equipment r	3,876	4,842	7,593	9,428	12,141	19,155	31,658	19,485
Other than Motor Vehicle r	1,722	1,874	3,799	6,261	7,749	10,445	18,848	16,968
	5,598	6,716	11,392	15,689	19,890	29,600	50,506	36,453
Highway								
Automobile	22,725	35,767	51,689	61,715	89,070	105,351	134,446	147,280
Truck & Trailer	2,828	5,452	6,971	8,467	12,642	22,106	41,802	49,412
Bus	269	277	258	300	389	427	574r	608
Dealers, Service Stations r	1,118	2,622	2,713	4,586	6,826	10,479	20,297	17,124
Repair, Garages, etc. r	130	225	473	1,459	2,913	3,513	7,379	5,378
	27,070	44,343	62,104	76,527	111,840	141,876	204,498r	219,802
Oil Pipe Line	971	1,419	2,325	2,600	2,988	4,331	9,544	12,949
Railroad	25,062	27,139	29,641	30,587	30,233	33,003	35,439	34,663
Transit (Includes Municipally Owned)								
Rail & Trolley	2,355	2,178	2,071	2,055	2,282	2,485	4,491r	5,340
Bus	326	357	379	408	466	524	1,687r	1,956
	2,681	2,535	2,450	2,463	2,748	3,009	6,178r	7,296
Water Carrier								
Inland	211	323	455	535	650	656	1,123r	1,265
Ocean	4,567	3,617	3,335	3,131	3,246	4,878	3,102	3,303
Great Lakes	105	157	267	241	299	328	348r	380
	4,883	4,097	4,057	3,907	4,195	5,862	4,573r	4,948
GRAND TOTAL	66,862	86,869	113,017	134,894	176,827	229,879	325,716r	331,849
TOTAL NET PRIVATE TANGIBLE ASSETS	692,200	892,900	1,184,600	1,489,000	1,909,000	2,766,900	4,491,700	N/A
PERCENT TRANSPORTATION	9.7%	9.7%	9.5%	9.1%	9.3%	8.3%	7.3%	

r Revised.

See source data page A-15

see source data page A-17

EXPENDITURES FOR NEW PLANT AND EQUIPMENT BY TRANSPORT AND RELATED INDUSTRIES*

(Billions of dollars)

	1947	1950	1955	1960	1965	1970	1975	1978r	1979r	1980p
Non-Manufacturing Industries:										
Air Transport	.17	.10	.26	.66	1.22	3.03	1.84	2.30	3.24	3.88
Railroad Transport @	.91	1.18	1.02	1.16	1.99	1.78	2.55	3.32	3.93	4.29
Other Transport	1.13	1.09	1.30	1.30	1.68	1.23	3.18	2.43	2.95	3.60
Total Transport	2.21	2.37	2.58	3.12	4.89	6.04	7.57	8.05	10.12	11.77
Total non-manufacturing	10.89	12.82	17.64	21.66	30.98	47.76	64.82	86.19	98.17	106.58
% Transport	20.3%	18.5%	14.6%	14.4%	15.8%	12.6%	11.7%	9.3%	10.3%	11.0%
Manufacturing Industries:										
Durable Goods·										
Transport Equipment										
Aircraft 1/	.04	.06	.23	.34	.46	.54	.92	1.51	2.10	2.74
Motor vehicles	.50	.49	.97	.79	1.89	1.59	2.06	4.65	5.36	6.39
Other transport equipment	.06	.03	.05	.12	.18	.30	.26	.24	.29	.32
Total transport equip.	.60	.58	1.25	1.25	2.53	2.43	3.24	6.40	7.75	9.45
Total durable goods	3.25	2.94	5.41	7.23	11.50	15.80	21.84	31.66	38.23	44.63
% Transport	18.5%	19.7%	23.1%	17.3%	22.0%	15.4%	14.8%	20.2%	20.3%	21.2%
Non-durable Goods: 2/										
Petroleum	.90	.85	1.60	1.50	2.10	2.92	5.46	8.22	8.81	10.25
Rubber	.13	.11	.15	.23	.42	.71	.75	1.31	1.35	1.31
TOTAL TRANSPORT & RELATED INDUSTRIES	3.84	3.91	5.58	6.10	9.94	12.10	17.03	23.98	28.03	32.78
TOTAL ALL INDUSTRIES	19.33	20.21	29.53	36.75	54.42	79.71	112.78	153.82	177.09	196.78
% TRANSPORT AND RELATED	19.9%	19.3%	18.9%	16.6%	18.3%	15.2%	15.1%	15.6%	15.8%	16.7%
% TRANSPORT CARRIERS ONLY	11.4%	11.7%	8.7%	8.5%	9.0%	7.6%	6.7%	5.2%	5.7%	6.0%

* Excludes agricultural business; real estate operators; medical, legal, educational, and cultural services; and nonprofit membership organizations.

1/ Includes guided missiles and space vehicles.

2/ Includes 52% of national expenditures for petroleum through 1975, 53% after 1975, and 75% of national expenditures for rubber (see Page 1).

@ This compares with AAR's estimates of capital expenditures by Class I railroads of (in billions of dollars): .86 in 1947, 1.07 in 1950, .91 in 1955, .92 in 1960, 1.63 in 1965, 1.35 in 1970, 1.79 in 1975, 2.78 in 1978, and 3.32 in 1979.

r Revised.

p Preliminary.

ESTIMATED NUMBER OF PRIVATELY AND PUBLICLY OWNED TRANSPORT UNITS

	1947	1950	1955	1960	1965	1970	1975	1977	1978
Motor									
Automobile	30,849,353	40,399,077	52,144,739	61,682,304	75,251,386	89,279,864	106,712,551	113,696,111	116,574,999
Commercial Buses*	84,000	89,000	80,000	75,369	83,883	88,823	93,833	97,864	101,558
Other Buses	103,457	134,652	175,249	196,760	230,401	290,198	368,311	391,393r	396,387
Motor Trucks**	6,804,688	8,598,962	10,288,804	11,914,249	14,795,051	18,748,421	25,775,715	29,562,485	31,702,604
Rail									
Freight Cars	2,025,008	2,008,761	1,996,443	1,965,486	1,800,662	1,784,181	1,723,605	1,666,533	1,652,774
Passenger Cars	45,130	43,585	36,894	28,396	21,516	11,378	6,754	5,756	4,518e
Locomotives	44,344	42,951	33,533	31,178	30,061	29,122	30,704	30,114	30,228
Air									
Single Engine	53,154	57,353	55,221	68,036	81,192	109,673	137,019	149,345	160,715
Twin Engine	2,137	2,827	4,101	8,241	12,547	18,921	24,934	26,848	28,914
Three Engine	41	30	15	8	180	673	1,018	1,098	1,184
Four Engine	440	530	738	1,437	1,488	1,444	1,087	1,077	1,160
Water									
Barges	12,331	13,805	14,875	16,777	17,033	19,809	26,882	28,707	NA
Towboats	4,208	4,042	4,163	4,203	4,054	4,230	4,240	4,481	NA
Ships	2,114	1,099	1,072	957	998	764	534	540	554

NA Not available.
r Revised.
e Estimate.
* Includes municipally owned transit units.
** According to Censuses of Transportation for 1963, 1967 and 1972, only a relatively small number of trucks were of the larger sizes, viz:

	Under 20,000 lbs.	%	20,000 to 26,000 lbs.	%	Over 26,000 lbs.	%	Miscellaneous Sizes	%
1963	9,466,800	78.4	1,255,800	10.4	736,750	6.1	615,825	5.1@
1967	12,399,840	87.2	739,440	5.2	1,080,720	7.6		
1972	17,420,000	88.3	828,000	4.2	1,500,000	7.6		

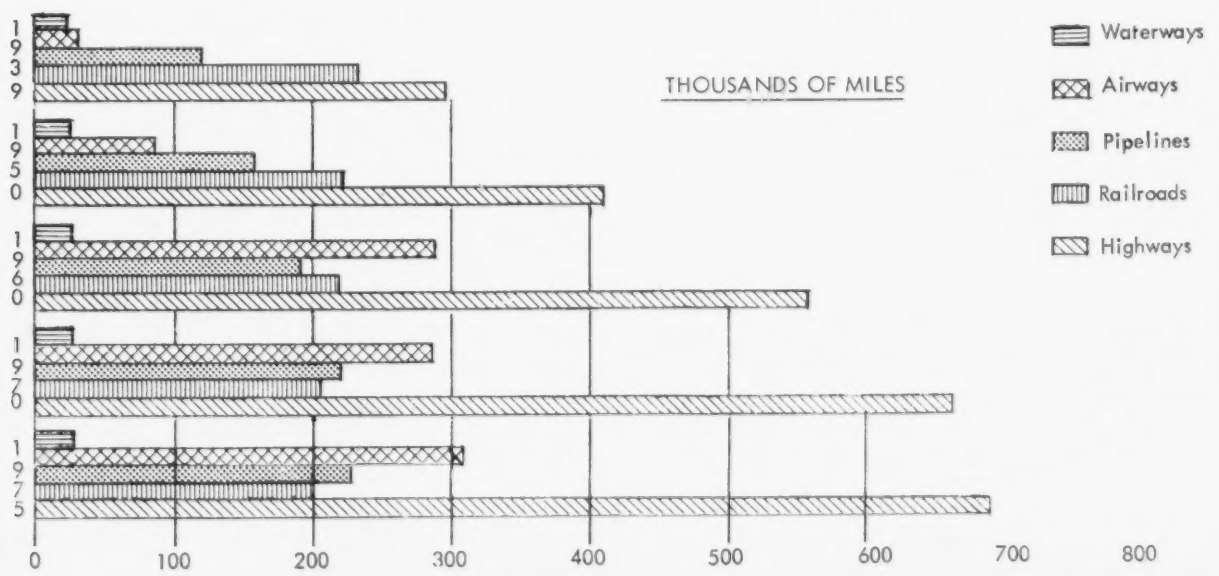
@ Due to better definitions this category was not needed in the later censuses.

see source data page A-17

BASIC INTERCITY TRANSPORTATION MILEAGE WITHIN THE CONTINENTAL UNITED STATES *

Year	Airways	Highways **	Pipelines ***	Railroads	Waterways
1939	31,162	296,822	122,500	235,064	24,641
1940	36,947	311,378	124,255	233,670	24,670
1945	49,821	342,558	137,545	226,696	24,815
1946	50,811	350,146	142,052	226,438	24,844
1947	54,130	362,911	145,404	225,806	24,873
1948	64,535	376,342	151,626	225,149	24,902
1949	70,662	390,470	152,814	224,511	24,931
1950	80,861	409,133	158,472	223,779	24,960
1951	85,662	427,328	162,151	223,427	24,989
1952	136,001	443,226	170,504	222,508	25,018
1953	145,702	457,751	179,023	221,758	25,047
1954	154,641	470,829	186,723	221,098	25,076
1955	171,475	486,750	188,540	220,670	25,105
1956	181,917	503,372	195,000	220,221	25,134
1957	194,865	517,944	201,800	219,067	25,163
1958	210,144	531,208	189,982	218,399	25,192
1959	203,651	546,049	190,463	217,565	25,221
1960	293,003	557,729	190,944	217,552	25,253
1961	245,620	571,145	200,543	216,445	25,260
1962	248,270	583,302	204,064	215,090	25,260
1963	252,325	594,412	206,876	214,387	25,260
1964	263,348	606,154	210,867	212,603	25,380
1965	268,275	617,114	213,764	211,925	25,380
1966	259,083	628,600	216,745	211,107	25,380
1967	264,165	640,313	209,478	209,826	25,380
1968	277,554	648,768	213,555	208,648	25,380
1969	283,861	657,601	216,453	207,526	25,543
1970	291,231	665,903	218,671	206,265	25,543
1971	295,301	673,484	219,899	205,220	25,543
1972	300,126	679,313	221,127	203,299	25,543
1973	304,260	680,408	223,535r	201,585	25,543
1974	307,783	681,646	224,712r	200,916	25,543
1975	313,178	685,052	225,889r	199,126r	25,543
1976	332,662	689,648	227,066r	192,396r	25,543
1977	327,822	686,329	228,243(e)	191,205	25,543
1978	333,734	706,289	229,420(e)	190,555	25,534

* All mileages are statute miles. ** Includes paved primary and secondary roads under state control.
*** Oil pipe lines only (includes gathering lines). (e) TAA estimate. r Revised.



see source data page A-18

TRANSPORTATION DEMAND vs. TOTAL DOMESTIC DEMAND FOR PETROLEUM

(In Thousands of Barrels)

	1955	1960	1965	1970	1975	1977	1978
HIGHWAY							
Motor Fuel	1,136,442	1,373,648	1,692,963	2,198,290	2,594,865	2,849,108r	2,975,755
Asphalt Paving Products	59,214	80,704	101,428	129,769	119,625	127,479r	144,992
Road Oils	8,032	6,475	6,223	10,342	5,850	3,377	3,687
Total	1,203,688	1,460,827	1,800,614	2,338,401	2,720,340	2,979,964r	3,124,434
%	80.3%	82.9%	86.2%	85.9%	84.6%	83.9%	83.4%
WATER							
Diesel Fuel & Distillate	16,675	18,730	15,532	19,503	26,138	33,512	37,591
Residual Fuel Oil	115,128	94,084	73,639	89,850	96,673	128,966	157,495
Total	131,803	112,814	89,171	109,353	122,811	162,478	195,086
%	8.8%	6.4%	4.3%	4.0%	3.8%	4.6%	5.2%
RAIL							
Diesel Fuel & Distillate	84,668	86,490	86,436	88,416	93,191	99,306	99,841
Residual Fuel Oil	15,018	5,610	4,001	2,222	583	329	206
Total	99,686	92,100	90,437	90,638	93,774r	99,635	100,047
%	6.7%	5.2%	4.3%	3.3%	2.9%	2.8%	2.7%
AIR *							
Aviation Gasoline	35,275	36,954	14,332	3,843	10,417	12,472	13,133
Jet Fuel	47	33,739	68,157	154,418	238,270	264,277	276,832
Total	35,322	70,693	82,489	158,261	248,687	276,749	289,965
%	2.4%	4.0%	3.9%	5.8%	7.7%	7.8%	7.7%
ALL MODES							
Lubricants	26,816	25,749	27,363	27,585	30,839	32,078	37,470e
%	1.8%	1.5%	1.3%	1.0%	1.0%	0.9%	1.0%
TOTAL TRANSPORTATION DEMAND	1,497,315	1,762,183	2,090,074	2,724,238	3,216,451	3,550,904r	3,747,002
	100%	100%	100%	100%	100%	100%	100%
TOTAL DOMESTIC DEMAND	3,087,775	3,535,805	4,125,458	5,364,473	5,975,515	6,727,315	6,879,155
Transport % of Total Demand	48.5%	49.8%	50.7%	50.8% r	53.8%	52.8%	54.5%

r Revised
(e) Estimated.
* Excludes military use.

PETROLEUM TRANSPORT BY MODE OF TRANSPORT

Millions of Tons

	1939	1947	1955	1960	1965	1970	1975	1977
Pipeline	148	238	413	468	588	790	879	986
	39.2%	38.4%	42.8%	43.1%	44.4%	46.9%	48.0%	47.5%
Water Carrier	148	209	284	318	324	403	404	447
	39.2%	33.7%	29.5%	29.2%	24.5%	23.9%	22.1%	21.5%
Truck	22	106	223	270	385	466	521	614
	5.8%	17.1%	23.2%	24.8%	29.1%	27.6%	28.4%	29.6%
Railroad	60	67	43	32	26	27	27	29
	15.8%	10.8%	4.5%	2.9%	2.0%	1.6%	1.5%	1.4%
	378	620	963	1,088	1,323	1,686	1,831	2,076
	100%	100%	100%	100%	100%	100%	100%	100%

Billions of Ton-Miles

Year	Total Crude & Products Ton-Miles	PIPELINES Ton-Miles	PIPELINES Percent of Total	WATER CARRIERS Ton-Miles	WATER CARRIERS Percent of Total	MOTOR CARRIERS Ton-Miles	MOTOR CARRIERS Percent of Total	RAILROADS Ton-Miles	RAILROADS Percent of Total
1972	838.8	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19
1973	843.6	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76
1974	847.7	506.0	59.69	297.0	35.04	29.0	3.42	15.7	1.85
1975	846.7	507.0	59.88	298.0	35.20	27.6	3.26	14.1	1.66
1976	867.7r	515.0r	59.35r	306.9	35.37r	32.5	3.75r	13.3p	1.53r
1977	924.5p	546.0p	59.06p	333.3	36.05p	30.7p	3.32p	14.5p	1.57p

r Revised.
p Preliminary.

see source data page A-18

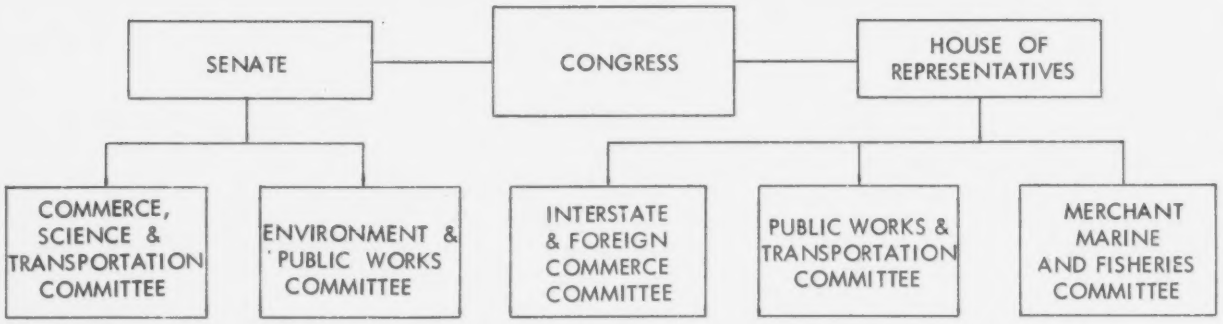
see source data page A-19

PETROLEUM CONSUMPTION BY MODE OF TRANSPORT*
(Millions of Barrels)#

	1965	%	1970	%	1972	%	1975	%	1976	%	1977	%	1978	%
HIGHWAY	1,692.17	84.41	2,149.58	80.97	2,501.47	83.93	2,594.80	83.81	2,754.82	83.79	2,848.47	83.47	2,984.47	83.19
Auto and Taxi	1,195.38	59.63	1,563.07	58.88	1,740.98	58.41	1,809.76	58.45	1,866.63	56.77	1,910.13	55.97	1,988.13	55.41
Motorcycle	1.64	.08	3.21	.12	8.14	.27	10.64	.34	10.67	.33	10.75	.32	13.25	0.37
Bus	20.51	1.02	21.74	.82	20.97	.70	21.26	.69	23.01	.70	23.67	.69	24.25	0.68
(Intercity)	(6.49)	(.32)	(7.27)	(.27)	(6.86)	(.23)	(4.31)	(.14)	(4.34)	(.13)	(4.33)	(.13)	(4.29)	(0.12)
(School)	(5.93)	(.30)	(7.14)	(.27)	(7.61)	(.25)	(8.14)	(.26)	(9.28)	(.28)	(9.56)	(.28)	(9.69)	(0.27)
(Local)	(8.09)	(.40)	(7.33)	(.28)	(6.50)	(.22)	(8.81)	(.29)	(9.39)	(.29)	(9.78)	(.28)	(10.27)	(0.29)
Truck	474.64	23.68	561.56	21.15	731.38	24.54	753.14	24.33	854.51	25.99	903.92	26.49	958.84	26.73
(Single-Unit)	(321.52)	(16.04)	(410.40)	(15.46)	(526.62)	(17.67)	(520.67)	(16.82)	(593.20)	(18.04)	(625.12)	(18.32)	(661.43)	(18.44)
(Combination)	(153.12)	(7.64)	(151.16)	(5.69)	(204.76)	(6.87)	(232.47)	(7.51)	(261.31)	(7.95)	(278.80)	(8.17)	(297.41)	(8.29)
RAIL	89.11	4.45	90.68	3.42	95.29	3.20	90.76	2.93	94.68	2.88	96.92	2.84	96.58	2.69
Freight	75.91	3.79	84.79	3.20	93.24	3.13	87.45	2.82	91.55	2.78	93.80	2.75	93.17	2.60
Passenger	13.20	.66	5.89	.22	2.05	.07	3.31	.11	3.13	.10	3.12	.09	3.41	0.10
AIR	131.95	6.58	290.82	10.95	265.31	8.90	270.35	8.73	272.72	8.29	286.13	8.39	275.57	7.68
Commercial Carrier	123.07	6.14	272.33	10.26	245.57	8.24	248.76	8.03	248.42	7.55	258.13	7.57	250.93	6.99
General Aviation	8.88	.44	18.49	.69	19.74	.66	21.59	.70	24.30	.74	28.00	.82	24.64	0.69
WATER	91.45	4.56	123.60	4.66	118.41	3.97	140.18	4.53	165.74	5.04	180.91	5.30	230.80	6.43
Foreign Trade@					49.75	1.67	73.25	2.37	101.14	3.08			143.08	3.99
Domestic Trade					52.30	1.75	49.56	1.60	46.41	1.41			52.01	1.45
Domestic-Other+	2.29	0.01	14.24	0.54	16.36	0.55	17.37	0.56	18.19	0.55	18.43	0.54	35.71**	1.00
TOTAL	2,004.68	100	2,654.68	100	2,980.48	100	3,096.09	100	3,287.96	100	3,412.43	100	3,587.42	100

* Includes both for-hire and private. Figures differ from those on Page 32 because of methods and sources used.
\# To convert to gallons, multiply by 42.
\+ Vessels using gasoline. Other catogories cover ships, barges, etc. using distillate and residual fuel oil.
@ Includes purchases in U.S. by both American and foreign carriers.
** Includes pleasure vessels not covered in previous years.

STANDING CONGRESSIONAL COMMITTEES HAVING JURISDICTION OVER TRANSPORTATION



The present standing committee structure of Congress includes several committees which have both direct and indirect jurisdiction over policies affecting the transportation industry. The organizational chart above indicates the positions of these committees within the structure of the Congress. The table of functions points up the major areas of the transportation industry covered by the various committees, as well as the similarity of their respective jurisdiction.

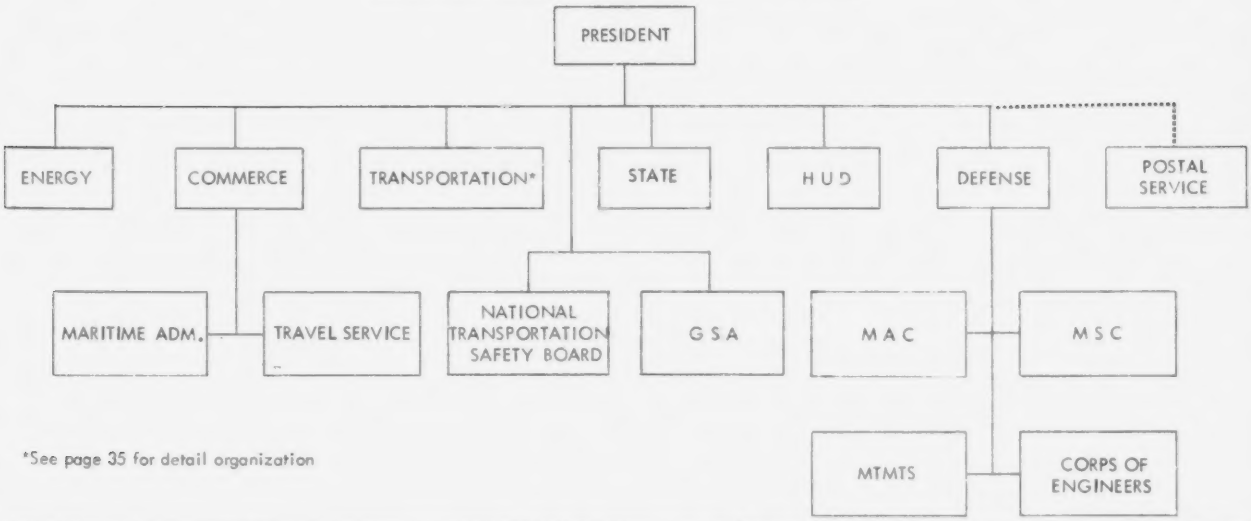
SENATE COMMITTEE	HOUSE COMMITTEE
Commerce, Science and Transportation Regulation of interstate railroads, buses, trucks, oil pipelines, freight forwarders, domestic water carriers and domestic and international air carriers. Inland waterways. Promotion of civil aviation, including subsidies and airport construction. International water carriers generally, including registering and licensing of vessels and small boats; navigation and the laws relating thereto; measures relating to subsidies; and the inspection and safety of vessels. Approve Maritime Administration programs.	Interstate & Foreign Commerce Jurisdiction over railroads and the Railway Labor Act (which also covers airline labor). Air pollution. Merchant Marine & Fisheries Same basic jurisdiction over international water transport as Senate Commerce Committee, plus unregulated domestic oceangoing water transportation and water pollution. Approve Maritime Administration programs.
Environment and Public Works Projects for the benefit of water navigation and rivers and harbors. Measures relating to the construction or maintenance of highways. Air and water pollution.	Public Works & Transportation Same basic jurisdiction as the Senate Environment & Public Works Committee, plus jurisdiction over interstate buses, trucks, oil pipelines, freight forwarders, water carriers, as well as urban mass transport and domestic and international air carriers.

Legislation affecting transportation also comes within the jurisdiction of several other Congressional committees, such as:

Appropriations	———	Actual appropriation of funds
House Government Operations Senate Governmental Affairs	———	Transportation operations of Federal agencies.
Judiciary	———	Rules and procedures for regulatory agencies.
House Post Office & Civil Service Senate Governmental Affairs	———	U.S. Postal Service, including parcel post.
House Ways & Means Senate Finance	———	Financial matters, with House Committee originating all tax bills.
House Education & Labor Senate Human Resources	———	Transport labor generally, including mediation or arbitration of disputes. (Note House I & FC Committee's jurisdiction over rail labor.)
Senate Banking, Housing & Urban Affairs	———	Urban mass transport (Note similar jurisdiction of House PW&T.)

see source data page A-19

TRANSPORT RESPONSIBILITIES IN THE EXECUTIVE BRANCH

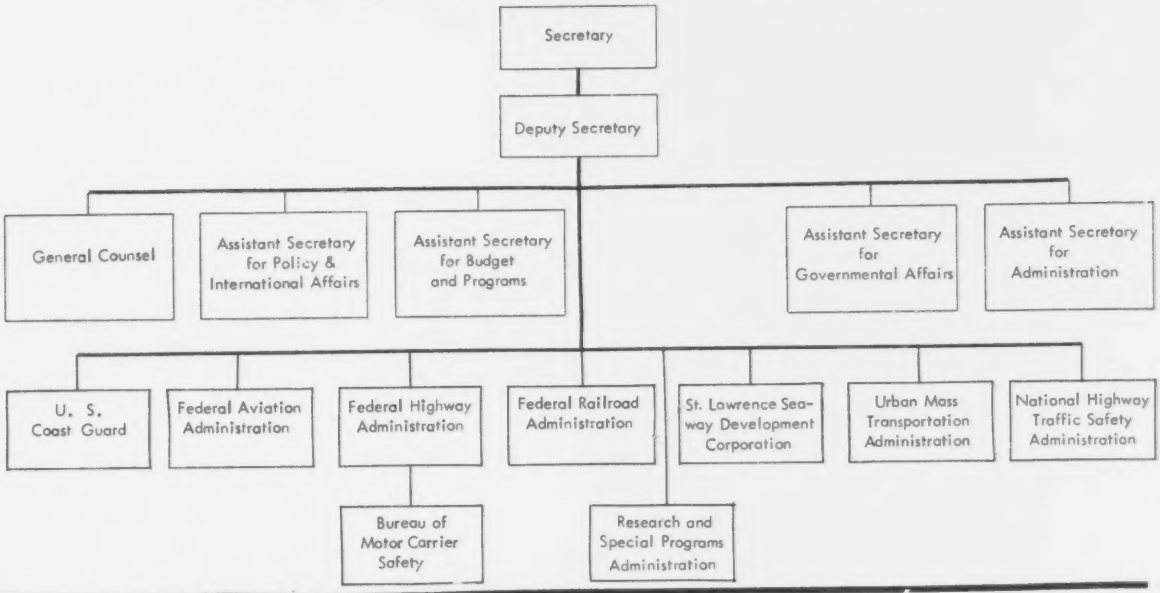


*See page 35 for detail organization

OFFICE OR AGENCY	RESPONSIBILITY
President	Rules on matters relating to international air transport by U.S. air carriers and foreign air carrier operations to the U.S. Appoints members of Federal agencies and appoints chairmen of the CAB, ICC, and FMC.
Department of State	Develops policy recommendations and approves policy programs concerning international aviation and maritime transportation.
National Transportation Safety Board	Promotes transportation safety by conducting independent accident investigations involving all modes of transport; by regulating accident reporting procedures; and by recommending changes for improvement. Reviews on appeal suspensions/denials of licenses issued by DOT agencies.
Department of Housing and Urban Development	Administers variety of federally aided housing and community development programs, consulting with and advising Department of Transportation in order that DOT urban transport programs are compatible with HUD programs.
Department of Energy	Develops and implements national energy policies. Administers, through Economic Regulatory Administration, petroleum and natural gas pricing, allocation, and import/export controls. Assures availability of energy supplies, and performs regulatory functions not assigned to Federal Energy Regulatory Commission (see pg. 36).
U. S. Travel Service	Develops, plans and carries out a comprehensive program designed to stimulate and encourage travel to the United States by residents of foreign countries.
Maritime Administration	Promotes merchant marine; grants ship mortgage insurance; determines ship requirements, ocean services, routes and lines essential for development and maintenance of the foreign commerce of the United States; maintains the National Defense Reserve Fleet; develops ship designs, marine transportation systems, advanced propulsion concepts, and ship mechanization and management techniques. Its Maritime Subsidy Board awards subsidies, determines the degree of services and specific routes of subsidized operators.
U. S. Postal Service	Provides postal services throughout U.S., contracts for mail transport services, and takes final action, subject to judicial review, on recommendations of independent Postal Rate Commission on rates and mail classifications. Made independent agency of Executive Branch in 1970, with 11-member Board-9 appointed by President and confirmed by Senate.
General Services Administration	Develops and operates transportation programs within the Federal Government; provides and procures transportation services; develops and implements procedures for improving motor equipment management, operation and rehabilitation programs of the Federal Government including assigning, regulating or performing the operation of interagency motor pools and motor transport systems.
Military Sealift Command	Provides ocean transportation for personnel and cargo of the Department of Defense and, as directed, for other agencies and departments of the United States. Also operates ships in support of scientific projects and other programs of the Federal Government.
Military Airlift Command	Provides air transportation for personnel and cargo for all the military services on a worldwide basis; in addition furnishes weather, rescue and photographic and charting services for the Air Force.
Military Traffic Management and Terminal Service	Directs military traffic management, land transportation, and common-user ocean terminal service within the United States, and for worldwide traffic management of the DOD household goods moving and storage program. Provides for the procurement and use of freight and passenger transportation service from commercial for-hire transportation companies operating between points in the continental U.S., except for long-term contract air-lift service.
Corps of Engineers	Constructs and maintains river and harbor improvements. Administers laws for protecting navigable waterways.

see source data page A-19

DEPARTMENT OF TRANSPORTATION - ORGANIZATION AND RESPONSIBILITIES


Secretary
Deputy Secretary
General Counsel
Assistant Secretary for Policy & International Affairs
Assistant Secretary for Budget and Programs
Assistant Secretary for Governmental Affairs
Assistant Secretary for Administration
U. S. Coast Guard
Federal Aviation Administration
Federal Highway Administration
Federal Railroad Administration
St. Lawrence Seaway Development Corporation
Urban Mass Transportation Administration
National Highway Traffic Safety Administration
Bureau of Motor Carrier Safety
Research and Special Programs Administration

OFFICE OR AGENCY	RESPONSIBILITY
Secretary of Transportation	Principal assistant to President in all matters relating to Federal transportation programs. His Office directly handles public and consumer affairs, deepwater ports, civil rights, contract appeals.
Deputy Under Secretary	Acts for and exercises the power of the Secretary and is responsible for the supervision and coordination of the activities of the Department as directed by the Secretary.
General Counsel	Chief legal officer of DOT and final authority on questions of law. Represents DOT before regulatory agencies, supervises legal aspects of DOT legislative programs, coordinates legal resources.
Assistant Secretary for Policy & International Affairs	Formulates transport policy and implementing plans; coordinates U.S. interests in international transportation affairs; analyzes social, economic, and energy aspects of transport; assesses performance of transport system; coordinates environment and safety programs; handles DOT's interest in domestic and foreign marine transport.
Assistant Secretary for Budget and Programs	Supervises DOT's transition to zero-based budgeting, to hold down costs through annual budget reviews.
Assistant Secretary for Governmental Affairs	Maintains liaison with the Congress, coordinates DOT's legislative activities, and assures effective communication and coordination with other Federal agencies, as well as State and local governments.
Assistant Secretary for Administration	Supervises and implements DOT policies relating to personnel and training, management systems, procurement and contracting, installations and logistics, and investigations and security.
U.S. Coast Guard	Maintains network of rescue vessels, aircraft, and communications facilities to protect lives and property on high seas and navigable waters of U.S. Enforces Federal laws governing navigation, vessel inspection, port safety and security, marine environmental protection, and resource conservation. Enforces ship construction and safety standards, and regulates Great Lakes' pilotage.
Federal Aviation Administration	Promotes civil aviation generally, including R&D, and promulgates and enforces safety regulations. Develops and operates the airways, including facilities. Administers federal airport program.
Federal Highway Administration	Administers Federal-aid highway program of financial assistance to States for highway construction. Develops and administers program to promote highway safety, including financial aid to States. Administers highway beautification program and highway programs on Federal/territorial lands. Coordinates and helps fund research and development programs on wide variety of highway problems.
Federal Railroad Administration	Consolidates U.S. support of rail transport, administers and enforces rail safety regulations, administers rail financial-aid programs, conducts research and development to improve rail service. Responsible for DOT R&D Test Center at Pueblo, Colorado, and operations of U.S.-owned Alaska Railroad.
St. Lawrence Seaway Development Corporation	Administers operation and maintenance of the U.S. portion of St. Lawrence Seaway, including toll rates.
Urban Mass Transportation Administration	Responsible for developing comprehensive coordinated mass transport systems for metropolitan and urban areas, including R&D and demonstration projects; aid for technical studies, planning, engineering, and designing; and financial aid to local transit for operations.
National Highway Traffic Safety Administration	Implements motor vehicle safety programs and issues standards prescribing levels of safety for motor vehicles and their equipment. Conducts test programs to assure compliance with standards and need for them. Helps fund State/local motor vehicle safety programs, maintains national poor-drivers' register, sets fuel economy standards for autos, in cooperation with EPA/DOE, and assesses penalties.
Research and Special Programs Administration	Directs DOT's programs relating to technology R&D, data collection, transport security, university research, transport facilitation (including international), hazardous materials, and pipeline safety.
Bureau of Motor Carrier Safety	Regulates safety performance of interstate commercial motor carriers, including movement of hazardous materials, and cargo security/noise abatement programs. Makes road checks and prosecutes violators.

see source data page A-19

FEDERAL TRANSPORTATION REGULATORY AGENCIES

The Federal transportation regulatory agencies are arms of the legislative branch of the Government. They are not courts. They do have recourse to the courts in order to enforce their orders, although they exercise quasi-judicial powers as well as quasi-legislative powers. Their members are appointed by the President with Senate approval at salaries of $50,000 with chairmen receiving $2,500 more. Not more than a majority of one can be from any political party.

INTERSTATE COMMERCE COMMISSION

The ICC was created in 1887 by the Act to Regulate Commerce. Its official complement of eleven members is being reduced unofficially to nine by allowing two vacancies to remain unfilled. Commissioners serve for seven years. The Chairman is appointed by the President, and the Vice Chairman is elected by the members.

Regulates	Major Functions
Railroads (1887), Express Companies, Sleeping Car Companies (1906). Motor Carriers (1935). (Private carriers and carriers of agricultural commodities exclusively are exempt, as are motor vehicles used by farm co-ops.) Water Carriers (1940) operating coastwise, intercoastal, and on inland waters of the U.S. (Carriers of liquid and/or dry bulk commodities are exempt.) Coal Slurry Pipelines (1906, in conjunction with oil Pipelines, which have been transferred to Federal Energy Regulatory Commission)--common carrier only. Freight Forwarders (1942). (Non-profit shippers' associations are exempt.)	Regulates, in varying degrees by mode, surface carrier operations, including rates, routes, operating rights, abandonments and mergers. Conducts investigations and awards damages where applicable and administers railroad bankruptcy. Prescribes uniform system of accounts and records and evaluates property owned or used by carriers subject to the act. Authorizes issuance of securities or assumption of obligations by carriers by rail and certain common and contract carriers by motor vehicle. Develops preparedness programs covering rail, motor and inland waterways utilization.

CIVIL AERONAUTICS BOARD

The CAB, as it exists today, is an outgrowth of the Civil Aeronautics Act of 1938, Presidential Reorganization Plans of 1940 and the Federal Aviation Act of 1958. There are five Board members, each serving a term of six years. The Chairman and Vice Chairman are appointed by the President.

Regulates	Major Functions
U.S. Domestic and International Air Carriers. (In 1977, domestic air cargo operations were removed from regulation; and, starting in 1978, domestic air passenger regulation is to be phased out: fares in 1981, routes in 1983, and CAB itself in 1985.) Foreign Air Carrier Operations, to, from, and within U.S.	Regulates carrier operations, including rates, routes, operating rights and mergers. Determines and grants subsidies. Assists in the development of international air transport and grants, subject to Presidential approval, foreign operating certificates to U.S. carriers and U.S. operating permits to foreign carriers.

FEDERAL MARITIME COMMISSION

The present FMC was established by Presidential Reorganization Plan 7 of 1961, but most of its regulatory powers are similar to those granted predecessor agencies by the Shipping Act of 1916 and subsequent statutes. It consists of five members serving four-year terms. The President names the Chairman. The Vice Chairman is elected annually by members.

Regulates	Major Functions
All U.S.-Flag and Foreign-Flag Vessels operating in the foreign commerce of the U.S. and common carriers by water operating in domestic trade to points beyond the continental U.S.	Regulates services, practices and agreements of water common carriers in international trade and rates and practices of water common carriers operating in domestic trade to points beyond the continental U.S. (Note entry and route-designation functions of Maritime Subsidy Board--page 34.)

FEDERAL ENERGY REGULATORY COMMISSION

The FERC was created by the Department of Energy Organization Act of 1977 as a component of the Department of Energy but with independent regulatory powers. Its five members serve four-year terms. The Chairman is appointed by the President, and the Vice Chairman is elected annually by the members.

Regulates	Major Functions
Oil Pipelines--common carrier only (transferred from ICC). Natural Gas Pipelines--(transferred from Federal Power Commission).	Regulates rights, rates, abandonments and mergers of oil and natural gas pipelines and the charges for sale of natural gas. Establishes valuations for oil pipelines.

see source data page A-19

Source Data

CURRENT TRAFFIC TRENDS
TRANSPORTATION PERFORMANCE INDICATORS
(Page iv)

Current Traffic Trends: is a page designed to present, for each of the several modes of transport, the regularly used and recognized indicators of traffic through the latest calendar quarter, or other period shown, which was available at the time of going to press, compared with the equivalent period in the preceding calendar year. This page is updated and published on the reverse of the title page in each quarterly supplement. It is felt that the key column in this tabulation is the one showing percent of change from the prior period.

Sources: Respective modal associations for all Air, Bus, Rail, Truck and Great Lakes information. Auto-Bus-Truck Vehicle-miles: Federal Highway Admin. Pipe Line: Dept. of Energy. International Water Maritime Admin. GNP and Industrial Production: Office of Business Economics, Dept. of Commerce.

IMPORTANCE OF TRANSPORTATION TO U.S. ECONOMY
(Page 1)

Basic Source: Facts sheets from "Transportation Facts and Trends", TAA, Washington, D.C.

NATIONAL EXPENDITURES

Transport Expenditures: See page 3, "Transportation Outlays vs. Gross National Product".
Private Auto: See page 5, "The Nation's Estimated Passenger Bill".
Non-ICC Regulated Truck: See page 4, "The Nation's Estimated Freight Bill", sum of Non-ICC Regulated and Local.
Regulated Carriers: See page 6, "Revenues of ICC, CAB and FERC Regulated Carriers in Domestic Operation".
Other Transportation Media: Residual after deducting above expenditures from "Adjusted Total", shown on page 3.

TAXES

See page 27, "Federal and State Taxes Derived from Transportation". Transport's share of total corporate, excise and individual taxes determined by using figures on above facts sheet and applying them to overall tax returns for three categories, from "Annual Report of the Commissioner of Internal Revenue".

CAPITAL OUTLAYS

See page 29, "Expenditures for New Plant and Equipment by Transport and Related Industries".

EMPLOYMENT

See page 23, "U.S. Employment in Transportation and Related Industries".

TRANSPORTATION IS A HEAVY USER OF OTHER INDUSTRIES' PRODUCTS

Basic Source: Response to TAA inquiries to respective associations and institutes, unless shown otherwise.
Rubber: Rubber Manufacturers Association, New York, New York.
Lead: Lead Industries Association, New York, New York.
Steel: American Iron and Steel Institute, Washington, D.C.
Copper: Copper and Brass Fabricators, Foreign Trade Association, New York, New York.
Petroleum: American Petroleum Institute, Washington, D.C. (See page 32, "Transportation Demand vs. Total Domestic Demand for Petroleum".)
Zinc: American Zinc Institute, New York, New York.
Aluminum: The Aluminum Association, New York, New York.
Cement: TAA estimate based on best available data.

NATIONAL ECONOMIC TRENDS VS. TRANSPORTATION TRENDS 1939-1979
(Page 2)

Gross National Product: Values in 1979 dollars calculated by multiplying values in constant 1972 dollars by the implicit price deflator for 1979. Implicit price deflator for 1979 and GNP in constant 1972 dollars for years 1979-1967 from "Economic Indicators", Council of Economic Advisors (June 1980), p.2. GNP in 1972 dollars for years 1966-1939 from "Economic Report of the President" (Jan. 1977), Table B-2.
Index of Industrial Production: "Economic Report of the President", Washington, D.C. (Jan. 1980). Table B-40, p.249.
Population: "Economic Report of the President", Washington, D.C. (Jan. 1980), Table B-26, p.235.
Intercity Ton-Miles: Figures same as those in "Total" column on page 8, "Intercity Freight by Modes".
Intercity Passenger-Miles: Figures same as those in "Total" column on page 18, "Intercity Travel by Modes".

TRANSPORTATION OUTLAYS VS. GROSS NATIONAL PRODUCT
(Page 3)

Passenger Bill: See "The Nation's Estimated Passenger Bill", p.5, and its source data.
Freight Bill: See "The Nation's Estimated Freight Bill", p.4, and its source data.
Adjustments: Additions represent expenditures by the Federal Government for public transportation facilities (airways, airports, highways, ground transportation R&D programs, and urban mass transportation programs) and by the state governments (highways) not otherwise included in Freight or Passenger Bills, less specific transport user charges included

in the passenger and freight transport outlays. See page 26, "Federal and State Expenditures for Transport Facilities", and its source data for gross outlays, and Table HF-10 in "Highway Statistics", FHWA (1978 and preceding years), for imposts on highway users.

Deletions represent total estimated share of freight costs included in the overall costs of new cars and gas and oil (10%) plus similar transport costs for tires and tubes (2%). Deductions made to prevent duplications when passenger and freight bills are added together for comparison with GNP.

Gross National Product: 1978-1966: "Survey of Current Business", Dept. of Commerce (Jan. 1980), Table 1; and equivalent tables in preceding editions.

Direct comparison of overall transportation expenditures to GNP believed justified since method of determining is very similar to that of GNP on an output basis. In brief, transportation share of GNP represents sum of following: Personal consumption expenditures for passenger transportation. Personal consumption expenditures for freight transportation as included in the cost of food, clothing, housing, etc. Government expenditures for passenger transportation and for freight transportation as included in the cost of goods, materials, etc. that it buys. A major share of the above represents business expenditures for both freight and passenger transportation services which must be included in the price of their products.

THE NATION'S ESTIMATED FREIGHT BILL
(page 4)

HIGHWAY

Truck - Intercity, ICC Regulated: 1978 - Unpublished from ICC. 1977-1972 - "Transport Economics", ICC (Vol. VI, No. 1, 1979), p.1, and previous editions. 1971-1964 - 87th Annual Report, ICC, p.131, and equivalent table for preceding year. For all other years, in prior Editions, "Transport Economics", ICC, March 1964 and January 1957 issues. Carrier revenues include local cartage under assumption that the majority of such revenues constitute pickup and delivery of intercity freight.

Truck - Intercity, Non-ICC Regulated: Revenues of Class I, II, and III carriers, same source as "ICC Regulated" above, divided by ICC-regulated ton-miles, less one cent per ton-mile as an estimated operating differential for non-regulated carriers. This revenue per ton-mile figure is multiplied by non-ICC regulated ton-miles. ICC-regulated and non-ICC regulated ton-miles are secured by applying the regulated percentage shown on page 9 to the total "Truck" ton-miles shown on page 8.

Truck - Local: 1978-1960 - Determined by multiplying total urban truck vehicle-miles (less personal travel by truck, based on Bureau of Census truck surveys) by estimated average cost per vehicle-mile. Urban vehicle-miles taken from "Highway Statistics", FHWA (1979 and preceding years), Table VM-1 for each year. Cost per vehicle-mile estimated by using costs shown in "Federal Motor Vehicle Fleet Report", GSA (July 1979 and preceding years) multiplied by a weighting factor of 8 for vehicles of 1 ton or less and by a weighting factor of 3 for 1½-ton vehicles (the factor being the relationship to the total number of vehicles) and divided by the sum of the factors, and to which is added the estimated driver cost. Driver cost per vehicle-mile estimate is based on the 1958 ICC Bureau of Accounts release indicating that in 1958, for regulated carriers with union labor, "drivers' wages may be expected to average more than 15¢ per mile on extremely short-haul traffic." The 1958 estimate of 15¢ per mile has been increased annually in direct proportion to the change in drivers' wages as shown in "Minimum Hourly Union Wage Rates - Indexes and Averages, Selected Trades: 1960-1979", "Statistical Abstract of the U.S.", Dept. of Commerce (1979), Table 698.

Bus: 1977-1960 - Annual Report from the American Bus Association (1979), Table 4, and equivalent table in prior years' reports, plus unpublished data re: newpapers. Includes Class I carrier mail, express and newspaper revenues. ABA estimates that Class II and III carriers are 15% (1978-1969) and 10% (1968-1958) of Class I revenues. Both estimates are included in the totals.

RAIL

Railroads: 1978-1960 - "Transport Statistics in the U.S.", Part I, BOE, ICC (1978); and Part I for previous years. Includes freight, express, baggage, mail, milk, switching and demurrage revenues of Class I and II railroads, switching and terminal companies, and electric railways. Starting with 1974, figures include FRA rail service assistance grants and U.S. payments to rail retirement program, which totaled $245 million in 1978.

WATER

International: 1978-1974 - Data furnished by the Bureau of Economic Analysis, Dept. of Commerce. 1973-1965 - "Survey of Current Business", BEA, DOC, Washington, D.C. (August 1974), "International Transportation Transactions", Table 2, p.45 and equivalent table for prior years. Includes payments to foreign-flag carriers for import freight charges, plus payments to foreign carriers for charter hire and port charges, plus an amount estimated by TAA to account for import freight charges paid to U.S.-flag carriers (10% of the foreign import freight charges). 1964-1960 - Same source, Table 2, p.28, being 95% of Line 20, "Other transportation", which is roughly equivalent to later source information, which only goes back to 1965. Added to this for all years is the cost of MSC-charter cargo and tanker operations.

Coastal, Intercoastal: 1978-1960 - Revenues of Class A and B carriers plus estimated revenue of non-regulated carriers. Class A and B revenues - "Transport Economics", ICC (Vol. VI, No. 1, 1979), p.8; and same source for preceding years. Non-regulated carrier revenue - estimated by subtracting regulated ton-miles (same source) from coastwise ton-miles as reported in "Waterborne Commerce of the U.S.", Corps of Engineers (1978), Part 5, p.89; and equivalent tables in preceding years. The resulting ton-miles are multiplied by an estimated mills per ton-mile (ranging from 2.0 in 1958 to 4.1 in 1978), to estimate the cost of non-regulated carriers.

Inland Waterways: 1978-1964 - Figures derived by multiplying ton-miles (parenthetical figures) shown for "Rivers and Canals" (page 8) by a cost per ton-mile figure. These costs taken from "Transport Economics", ICC, as shown on page 7, "Transportation Revenue vs. General Price Trends". 1963-1960 - Figures computed by TAA using 4 mills per ton-mile in 1958 (a figure based on Congressional testimony that year) and adjusted annually through 1963 in proportion to the change in revenue per ton of ICC-regulated tonnage times ton-miles shown in above source.

Great Lakes: 1978-1960 - Figures derived by multiplying ton-miles (parenthetical figures) shown for "Great Lakes" (page 8) by a cost increasing from 2.8 mills per ton-mile in 1960 to 6.9 mills in 1978, based on estimates by Lake Carriers' Association.

Locks, Channels, etc.: 1978-1960 - Figures shown are the same as the Federal expenditures for "Rivers & Harbors" shown on page 26, "Federal & State Expenditures for Transport Facilities".

OIL PIPE LINE

Regulated: 1978-1977 - "Transportation Revenue and Traffic of Large Pipe Line Companies", FERC. All previous years - same as "Truck-Intercity, ICC Regulated" above.

Non-Regulated: 1978-1975 - TAA estimate based on percentage of non-regulated ton-miles (estimated to be 10% in 1978). 1974-1969 - "Transport Economics", ICC (Vol. III, No. 4, 1976), p.14, and equivalent table in preceding years. 1968-1962 - "84th Annual Report", ICC (1970), p.78, and equivalent page in predecessor reports; shows percent of ICC-regulated vs. non-ICC regulated pipeline ton-miles. TAA assumes non-regulated revenues were in proportion to regulated revenues.

AIR

Domestic: 1978-1973 - "Air Carrier Financial Statistics", CAB (December 1978), Table 1, p.2. For all other years - "CAB Handbook of Airline Statistics" (1973). Figures include freight, express, excess baggage, adjusted mail, and freight charter revenues of the Certificated Airlines, for the listed years. CAB did not show freight and passenger charter revenues separately until 1961, therefore, 1970-1961 are actual. 1960 - Allocation to freight was based on the 1961 percentage relationship. 1955-1939 - Air Transport Association estimates 25% of total charter revenues attributable to freight movement and were so allocated. Freight revenues of Supplemental Airlines were allocated in relation to ton-miles in "Air Carrier Traffic Statistics", CAB, Part III (December for each year).

International: 1978-1972 - "Air Carrier Financial Statistics", CAB (December 1978), Table 1, p.7. 1971-1960 - "Handbook of Airline Statistics", CAB (1973), Part IV, Table 13, p.227. Figures shown are for the same sources of revenues and for the same categories of carriers as for "Domestic" above.

OTHER CARRIERS

Freight Forwarders: 1978-1976 - Class A - "Transport Statistics in U. S. "ICC Part III for each year. Class B-unpublished from ICC. 1975 - Class A: "90th Annual Report of the Interstate Commerce Commission", ICC (1976), App. E, Table 14. Class B: TAA estimate. 1974-1960 - "Transport Statistics in the U.S.", (1974), Part 3, p.3 and equivalent page in prior years' reports. Figures shown represent total transportation revenues of ICC-regulated Class A and B freight forwarders less payments made to other carriers for purchase of transportation.

REA Express: 1976 - No data as now out of business. 1975 - TAA estimate. 1974-1960 - Domestic express revenues shown in "Transport Statistics in the U.S.", ICC (1974), Sec. F, and equivalent predecessor page in prior years' reports, less purchase of transportation.

OTHER SHIPPER COSTS

Loading & Unloading Freight Cars: 1978-1964 - Figures derived by multiplying the sum of total freight car loadings originated by TAA-estimated cost per car ($66.37 in 1978). Carloadings for 1978-1972 - "Yearbook of Railroad Facts" AAR (1979), p.25. Carloadings for 1971-1964 from "Freight Commodity Statistics of Class I Railroads in the U.S.", ICC (Years 1971-1964). Carloadings for 1963-1960 from "Commodity Statistics of Class I Railroads in the U.S.", ICC (1963) and predecessor reports for prior years.

Operation of Traffic Departments: In 1978, TAA-estimated salaries for traffic managers and shipping clerks were $25,323 and $11,376 respectively. 1975-1969 - Annual salary adjustments were made in accordance with "Survey of Current Business", BEA, Table 6.5 (July of each year) and in 1965-1962 in accordance with manufacturing employee salaries in the "National Income and Product Accounts of the U.S. - 1929-1965", OBE Table 6.6..Basic source of salary of traffic manager was survey by "Handling & Shipping" published in Oct./Nov. 1961 issue.

GROSS NATIONAL PRODUCT: Same source as for page 3 and page A-2.

THE NATION'S ESTIMATED PASSENGER BILL
(Page 5)

PRIVATE TRANSPORTATION

Auto

Basic Source - "Survey of Current Business", Bureau of Economic Analysis, Department of Commerce (July 1978), Table 1.16 (Gross Auto Output) and Table 2.6 (Personal Consumption Expenditures), and prior issues.

New and Used Cars: Sum of PCE New Autos and PDE New Autos in Table 1.16 (Gross Auto Output) plus sum of PCE Used Net Purchases and PDE Used Net Purchases.

Tires, Tubes, Accessories:
Gasoline and Oil :
Tolls :
Insurance Less Claims :
Repair, Greasing, etc. :

Figures for these five categories taken from Table 2.6. The published figures have been divided by a factor of .85 in order to put back in the estimated expenditures for business use that were deducted by BEA in preparing the tables.

Interest on Debt: 1978-1977 - TAA Estimate. Following discontinuance of original source, TAA estimates based on National Automobile Dealers Association estimate of auto interest on debt as shown in NADA's "Franchised New Car & Truck Dealer Facts" (1979), p.26. For previous years see source data, 15th Edition "Transportation Facts & Trends", p.A-4.

Auto Registration Fees: "Highway Statistics", Federal Highway Administration (1978), Table MV-2, and equivalent table in preceding editions.
Operator's Permit Fees:

Small Truck: Determined by multiplying total urban truck vehicle-miles by 3/5th of the percent of local truck miles used for personal transportation, as shown in "Truck Inventory and Use Survey" 1972 Census of Transportation, U.S. Department of Commerce table, 14, p.19 and corresponding table in 1963 Census of Transportation. Intervening years' percentages estimated by TAA. The product is multiplied by the cost per vehicle-mile shown in "Federal Motor Vehicle Fleet Report", GSA (July, 1979 and preceding years). See "Truck-Local" on page A-3.

Air

Aircraft: 1978-1964 - Figures represent estimated total U.S. retail sales value of new general aviation and business aircraft delivered. General Aviation Manufacturers Association reports annually the value of these aircraft manufacturers' net billing price, which GAMA estimates to be about 75% of the retail price.

Operating Costs: 1978-1972 - Estimated by TAA based on changes in total hours flown ("FAA Statistical Handbook of Aviation, Calendar Year 1978", FAA (1978), Table 8.3). 1970 - "General Aviation Cost Impact Study",

FAA (June 1973), Vol. IV, pp.19 and 70-90. 1965 - "American Aviation Market Memo", American Aviation Publications, Inc. (July 1965). Figures include expenditures for wages and salaries, maintenance, gas and oil, insurance, and other expenditures including taxes.

FOR-HIRE TRANSPORTATION

Local

Bus and Transit: 1978-1960 - "Transit Fact Book", American Public Transit Association, (1977-1978), Table 4, plus federal/state/local subsidies and capital grants (Source: "Transit Fact Book", APTA, and "Budget of the U.S.")

Taxi: 1978-1960 - Same source as for "Private Auto above. The published figures have been divided by a factor of .71 for the year 1965 and of .55 for the years 1970-1975 in order to put back in the expenditures for business use deducted by OEA in preparing the tables.

Rail Commutation: 1978-1960 - "Yearbook of Railroad Facts", AAR (1979), p.14 and prior issues.

School Bus: 1978-1975 - Advance release from the National Center for Educational Statistics, Department of Health, Education, and Welfare. 1974-1960 - "Statistics of State School Systems", NCES, HEW (1973-1974), Table 41; and equivalent table in preceding years' reports. Figures for even-numbered years actual, odd-numbered estimates.

Intercity

Air: 1978-1965 - "Air Transport", Air Transport Association (1979), pp.9-11, and equivalent table in preceding reports. Figures are for the scheduled airlines and consist of consolidated industry passenger revenue less international and territorial airlines revenue, plus 36% of consolidated industry "Other" revenue after deducting all the all-cargo, international, and territorial airlines "Other" revenue. Also included is supplemental airlines passenger revenue, and ton-mile information available in "Air Carrier Financial Statistics" and "Handbook of Airline Statistics," both by CAB. Federal transportation tax on domestic air fares is included. 1978-1973 - "Budget of the U.S. Government, Fiscal year 1979", Appendix, p.703 and appendix in preceding years' report. 1972-1965 - is actual collections reported in "Federal Tax Collections" (Fiscal year 1972), Internal Revenue Service, Table 4, and predecessor table in prior years' reports. 1960 - Estimated by TAA by determining relationship of air's revenue subject to the tax to the total modal revenues subject to the tax, applying this percentage to the collections reported by the IRS in the above source.

Bus: 1978-1960 - " A Report From The American Bus Association", ABA (1979), Tables 2 and 4; and "Transport Statistics in the U.S.", ICC (1973), p.104; and equivalent tables in preceding years' reports. Figures represent total operating revenues shown, less revenues from express, mail, and newspaper traffic, plus 15% (10% for 1970-1964) of Class II and Class III carriers. Federal transportation tax is included for the years 1962-1958, during applicable period.

Rail: 1978-1975 - Class I: "Yearbook of Railroad Facts", AAR (1979), p.14. Class II: estimated. 1974-1960 - "Transport Statistics in the U.S.", ICC (1974), Part 1, p.18, and advance release of Table 181. Equivalent tables in preceding years' reports are sources for earlier years. Revenues from Class I passenger sleeping car, parlor and chair car; and Class II passenger are added. From this sum is subtracted rail commutation revenue under "Local", above. Federal Grants to Amtrak and N.E. corridor included in total.

Water: 1978-1960 - "Transport Statistics in the U.S.", ICC (1978), Part 5, p.1, and equivalent page in prior years' reports, for total passenger revenue of water carriers regulated by the ICC.

International: 1978-1960 - "Air" and "Water" figures are the totals of the figures shown for air and sea transoceanic transportation expenditures by U.S. Residents to U.S. and foreign-flag carriers. "Facts & Trends", p.21.

GROSS NATIONAL PRODUCT: Same source as for p.3, p.A-2.

REVENUES OF ICC, CAB AND FERC REGULATED CARRIERS IN DOMESTIC OPERATION
(Page 6)

Freight

Railroad: 1978-1947 - "Transport Statistics in the U.S.," Part I, BOE, ICC (1978); and Part I for previous years. Includes freight, mail, express, milk, switching and demurrage revenues of Class I and II Line-Haul Railroads, Electric Railways and Switching and Terminal Companies.

Truck: 1978-1977 - Unpublished data from ICC. 1975-1955 "Transport Economics", ICC (Vol. VI, No. 1), 1978, p. 8 and same table in previous editions.

Oil Pipe Lines: 1978-1977 - FERC release "Transportation Revenue and Traffic of Large Pipe Line Companies". Previous years - Same as "Truck" above.

Water Carriers: 1978-1955 - "Transport Statistics in the U.S.", Part 5 (1978), ICC, Tables 1,2 and 4, Page 1 and equivalent tables in previous editions. 1950-1947 - "Statistics of Carriers by Water" for each year, both from the ICC. Included are Class A and B revenues from freight service, towing for regulated carriers, and terminal operations. Class B towing was estimated since 1963 by applying the average percentage relationship of Class B to Class A towing for the years 1959-1963 to Class A towing to derive Class B towing. Class A and Maritime carrier revenues are included.

Bus: 1978-1960 - "A Report from the American Bus Association", ABA (1979), Table 1, and equivalent table in preceding year' reports, plus unpublished data: newspapers. 1955-1947 - "Transport Statistics in the U.S.", ICC (1973), Part 7, p. 104; and equivalent table in preceding years' reports. Freight includes mail, express, and newspapers of Class I Carriers. Revenues of Class II and III carriers are estimated by ABA to be 15% (1976-1969) and 10% (1968-1947) of Class I revenues.

Air Carriers: 1978-1975 - "Air Carrier Financial Statistics", CAB (1979), pp.2, 101; and equivalent tables in preceding years' reports. 1970-1947 - "Handbook of Airline Statistics", CAB (1973). Figures include freight express, adjusted mail, excess baggage, charter freight revenues of the Certificated Carriers and freight revenues of the Supplemental Carriers. 1955-1947 - Air Transport Association estimates 25% of total charter revenues attributable to freight movement and were so allocated. Freight revenues of Supplemental Airlines were allocated the same as is shown under "Air", "Domestic" for the Nation's Estimated Freight Bill", on page 4.

Freight Forwarder: 1978 - Unpublished from ICC. 1977-1970 - "Transport Economics", ICC, Vol. VI, No. 1 (1978), p. 8; and equivalent table in preceding years' reports. 1965-1947 - "Transport Statistics in the U.S.", ICC, Part 8 for each respective year. Figures include payments to carriers for transport services.

REA Express: 1975 - Same source as "Freight Forwarder", above. 1970-1947 - "Transport Statistics in the U.S.", Part 3 for each year.

Passenger

Railroad: 1978 Class I: "Yearbook of Railroad Facts", AAR (1979), p.14. Class II and Electric Railways: TAA estimate. 1977-1947 - "Transport Statistics in the U.S.", Part 1, ICC (1977), Tables 9 and 84 and Section G, and equivalent tables in preceding years' reports. Includes passenger (intercity and commutation) sleeping car, parlor and chair, and other passenger train revenues of Class I, Class II, Electric Railways, and the Pullman Co. (last reported operating revenue in 1968).

Water Carrier: 1978-1955 - "Transport Statistics in the U.S.", Part 5, ICC (1978), Tables 1 and 2 and p.1; and equivalent tables in preceding years' reports. 1950-1947 - "Statistics of Carriers by Water", both from the ICC. Class A & B revenues include Passenger, other Line Service and Special Services revenues. All of these categories were only shown for 1955-1963 for Class B carriers. For other Line Services and Special Services, the average percentage relationship of Class B to Class A for the years 1959-1963 for each account, was calulated. This percentage was applied to the appropriate Class A accounts (1963-1974) to derive the corresponding Class B accounts. Also included are Class C and Maritime passenger revenues.

Air Carrier: 1978-1975 - "Air Carrier Financial Statistics", CAB (December, 1979), pp.2,71. 1970-1947 - "Handbook of Airline Statistics" CAB (1973). Figures include both scheduled and charter passenger and subsidy revenues of the Certificated Carriers and passenger revenues of the Supplemental Carriers. An allocation of Supplemental Carrier passenger revenues and Certificated Carrier charter revenues were made, when necessary, as shown under "Freight", "Air Carrier".

Bus: All years - Operating revenues minus freight revenues. 1978-1977 Unpublished data from ICC. 1976-1947 - "Transport Economics" ICC (Vol.V, No. 1 - 1978), p.1; and equivalent table in preceding years' reports, for operating revenues. Freight revenues are above.

Total Revenue

Railroad: 1978-1947 - "Transport Statistics in the U.S.", Part I, ICC (1978), Table 8 p.15, Section G. p.113, Table 83 p.162, and equivalent tables in preceding years' reports. Includes Class I and II Line-haul Railroads, Class I and II Switching and Terminal Companies, Electric Railways, and the Pullman Co. (last reported operating revenue in 1968).

Truck: Same source as "Truck" above.

Oil Pipe Line: same as "Oil Pipe Line" above.

Water: 1978 - "Transport Statistics in U.S.", ICC (1978), pp.1 and 30. Previous years - same as "Truck Freight" above.

Air Carriers: 1978-1975 - "Air carrier Financial Statistics", CAB (December, 1978), pp.2, 71. 1970-1947 - "Handbook of Airline Statistics", CAB (1971), Table 61: plus sum of freight and passenger revenues of Supplemental Carriers.

Bus: Same source as shown for "Passenger", above.
Freight Forwarder: Same source as "Freight", above.
REA Express: Same source as shown for "Freight" above.

Gross National Product: 1978-1947 - Same source as for p.3, A-2

TRANSPORTATION REVENUE vs GENERAL PRICE TRENDS
(Page 7)

AVERAGE REVENUE PER TON-MILE VS. PRODUCER PRICES

Rail: 1979-1965 - "Yearbook of Railroad Facts", AAR (1980), p.33. 1960-1947 - "Transport Economics", ICC (Dec. 1965), p.6.

Truck: 1978-1977 - Unpublished from ICC. 1976-1947 - "Transport Economics", ICC (Vol. V, No., 1978), p.11, Common Carriers, and equivalent table in prior issues.

Air: 1979-1970 - "Air Transport 1980", ATAA (1980), p.11. 1965-1947 - "Handbook of Airline Statistics", CAB (1973), Table 85, p.93. Figures per ton-mile are exclusive of any taxes on such fares.

Oil Pipe Line: 1977 - TAA estimate. 1976-1947 - "Transport Economics", ICC, (Vol. V, No. 1, 1978); and equivalent table in prior years.

Barge: 1978 - Unpublished from ICC. 1977-1965 - "Transport Economics", ICC (Table titled "Operating Statistics, Class A and B Water Carriers"). Used figures from Mississippi River and tributaries. Specific source reference for each year shown: 1965 (April 1966, p.12); 1970 (Feb.-Mar. 1971, p.12); 1971 (Aug.-Sep. 1972, p.7); 1972 (Vol. I, No. 3, 1974, p.15); 1973 (Vol. II, No.2, 1975, p.11); 1974 (Vol. III, No.2, 1976, p.6); 1975-1976 (Vol. IV, No. 3, 1977, p.32); 1977 (Vol. VI, No. 1, 1979, p.3).

Producer Price Index: 1979-1970 - "Economic Indicators", Council of Economic Advisors (June 1980), p.22. 1965 1947 - "Economic Report of the President" (January 1973), Table C-48, p.251.

ERAGE REVENUE PER PASSENGER-MILE VS. CONSUMER PRICES

Rail: 1979-1965 - "Yearbook of Railroad Facts", AAR (1980), p.34. 1960-1947 - Same table in preceding issues.

Bus: 1979-1978 - Unpublished from American Bus Association. 1977-1947 - "Transport Economics", ICC (Vol. VI, No. 1, 1979), p.2 and equivalent table in preceding years' issues.

Air: 1979-1970 - "Air Transport 1980", ATAA (1980), p.11. 1965-1947 - "Handbook of Airline Statistics", CAB (1973); Coach revenue - Table 80, First Class revenue - Table 77, Total revenue - Table 73. Coach revenue includes Coach plus Economy revenues in all tables.

Consumer Price Index: 1979-1970 - "Economic Indicators", Council of Economic Advisors (June 1980), p.23. 1965-1947 - "Economic Report of the President" (January 1973), Table C-44, p.244.

INTERCITY FREIGHT BY MODES
(Page 8)

Rail, Truck, and Oil Pipe Line: 1979-1978 Unpublished from ICC. 1977-1975 - "Transport Economics", ICC (Vol.VI, No.1, 1979, p.5 1974-1973 - "Transport Economics", ICC (Vol.III, No.4, 1976) pp. 13-14. 1972-1971 - "Transport Economics", ICC (Aug.-Sep. 1973), p.7. 1970-"Transport Economics", ICC (Sep.-Oct. 1971), p.4. 1969-1967 - "84th Annual Report", ICC (1970), p.77 and equivalent table in prior year reports. 1966-1959 - "Transport Economics", ICC (Nov.-Dec. 1967), p.5. 1958-1939 - "Intercity Ton Miles. 1939-1959", ICC (April 1961), p.4.

Great Lakes and Rivers & Canals: 1979 - TAA estimates. 1978-1967 - "Waterborne Commerce of the U.S.", Corps of Engineers (1978), Part 5, pp. 27 and 89. 1966-1950 - "Waterborne Commerce of the U.S.", Corps of Engineers (1975) Part 5, pp. 29 and 89 and equivalent tables in prior year reports. 1949-1939 - "Waterborne Commerce of the U.S.", Corps of Engineers (1954), Part 5, pp. 24-25.

Note: Separate ton-miles are shown for the Great Lakes, Rivers & Canals, and Domestic Deep Sea traffic because the Corps of Engineers uses different methods of data accumulation and of reporting the traffic in each category. For the years 1976-1961, an attempt has been made to exclude duplication which existed in previous figures. For example, in 1963, the 316 billion ton-miles of Domestic Deep Sea commerce shown in parenthesis in the separate table is the total of the reported 244 billion Domestic Deep Sea ton-miles plus that part of the ton-miles moving on the Great Lakes and on the Rivers & Canals in oceangoing vessels as a portion of a domestic deep sea movement. By deducting the later traffic from the totals of traffic in the Great Lakes and Rivers & Canals categories, we arrive at the 68 billion and the 94 billion ton-miles figures shown in parenthesis, which represent the traffic which was confined solely to each of the waterway categories. The higher Great Lakes and Rivers & Canals figures of 95 and 139 billion ton-miles, respectively, represent the total domestic waterborne traffic moved over each category, regardless of whether it was part of a domestic offshore movement. The total domestic waterborne traffic for 1963 was 478 billion ton-miles and can be determined by computing the sum of the three figures in parentesis or the sum of the three figures not in parenthesis. See "Waterborne Commerce of the U.S., 1964", Corps of Engineers, Supplement 2 to Part 5, p.4-7, and Part 5.

Air: 1979-1970 - "Air Carrier Traffic Statistics", CAB (Jan.1980), pp. 4,89; and previous December reports. Includes certificated and supplemental carriers. 1969-1939 - "Handbook of Airline Statistics", CAB (1973): sum of columns 3 and 17, Table 27, p.35 plus column 3 of Table 40, p.48, and through 1969, plus column 3 of Table 43, p.51 (Excess Baggage) after which it is accounted in Passenger Ton-miles.

Domestic Deep Sea: 1978-1939 - "Waterborne Commerce of the U.S.", Corps of Engineers (1978), Part 5, p.89; and same table in prior issues.

INTERCITY FREIGHT FEDERALLY REGULATED
(Page 9)

is table is designed to show the percent of the total freight ton-miles (including mail and express) of each mode of ansport that are federally regulated by such agencies as the Interstate Commerce Commission and the Civil Aeronautics ard. Figures have been shown only by the years in which firm information has been made available by the regulatory dies. The percentages are based on the ton-miles for each mode shown in "Transportation Facts & Trends", page 8. urces for the regulated ton-miles each mode are:

Rail: All years - Same sources as for "Rail", page 8. All intercity rail traffic is subject to ICC regulation.

Trucks: 1978-1977 - "American Trucking Trends", ATA (1978), p.99. Ratio of regulated ton-miles to total truck ton-miles as reported on p.8. of "Facts and Trends". 1976- "Transport Economics", ICC (Vol.VI,No.1), P. 6; and for 1975 - (Vol.V, No.1), p.2 1974 - "90th Annual Report of the Interstate Commerce Commission", ICC (1976). Appendix E, Table 4. 1972-1962 - equivalent table in preceding years' reports. 1961-1939 - "American Trucking Trends", ATA (1965), p.7.

Oil Pipelines: 1976-1962 - same source as "Trucks" above. 1956-1955 - "Transport Economics", ICC (March 1958), p.11.

Water: All modes - 1978-1962 - "Waterbourne Commerce of the U.S.", Corps of Engineers (1978), Part 5, Sec. 3, Table 2, and equivalent table in previous years reports.

Air: All years- Same sources as for "Air", p.8. All commercial interstate intercity cargo traffic was subject, until 1977, to regulation by the CAB. There is no readily identified amount of intrastate intercity air cargo.

Total: All years - consists of the total ton-miles shown in the total column on p.8 plus the ton-miles (non-parenthetical) shown at the bottom of p.8 for "Domestic Deep Sea".

INTERCITY TONNAGE CARRIED BY MODE
(Page 10)

Rail: All years - Class I and II revenue tons originated. 1979-1975 - Class I: "Yearbook of Railroad Facts", AAR 1980, p.28; Class II: estimated. 1974 - 1939 - "Transport Statistics in the U.S.", ICC (1974), Part 1, Table 84; and equivalent table in preceding years' reports.

Truck - ICC Regulated: 1979-1975 - TAA estimate based on changes in the American Trucking Assoc.'s annual truck tonnage index. 1974 (Actual Tonnage) - "Transport Statistics in the U.S.", ICC (1974), Part 2. 1973 - 1939 - "Transport Statistics in the U.S., 1973", ICC (1973), Part 7, Table 1, p.3; and equivalent table in preceding years' reports.

Truck - Non-ICC Regulated: 1979-1975 - TAA estimate based on preceding years' ratios of regulated tonnages to non-regulated ton miles. 1974-1939 - Total Truck Intercity Ton-miles shown in "INTERCITY FREIGHT BY MODES", p.8, minus the ton-miles represented by the percentage of federally regulated ton-miles shown in "INTERCITY FREIGHT FEDERALLY REGULATED", p.9, with the resultant ton-miles divided by the mean average of the length of haul for Class I Common and Contract Carriers, "Transport Economics", ICC (Vol. III, No.2-1976), p.3; and preceding year's reports.

Oil Pipe Line: 1978 - TAA estimate based on 1978 vs. 1979 increase in barrels, FERC news release "Transportation Revenue & Traffic of Large Pipe Line Companies". 1977-1939 - "Shifts in Petroleum Transportation", Association of Oil Pipe Lines (June 1979), Table 1, and equivalent table in prior years' reports.

Great Lakes, Rivers & Canals, Domestic Deep Sea: 1978-1947 - "Waterborne Commerce of the U.S.", Corps of Engineers, Part 5, Table 1, p.89; and equivalent tables in preceding years' reports.

Note: Tonnages shown for all water categories are comparable to the ton-miles in parenthesis on page 8. Also, such information as is available for years' prior to 1947 is not comparable with 1947 onward and therefore has not been shown.

Air: 1979-1947 - Originated tons revenue freight, express, and U.S. and foreign mail of the Certificated Scheduled Carriers, "Airport Activity Statistics of Certificated Air Carriers", CAB/FAA (Dec. 1979), Table 1, and equivalent table in preceding years' reports. 1946-1939 - Information not available.

REGULATED INTERCITY SMALL SHIPMENTS TRAFFIC
(Page 11)

All Carriers: 1978-1976 Unpublished Data from ICC. 1975 - "Transport Economics", ICC (Vol. V, No. 1), Tables 1,2. 1974-1965 - same source (Vol. III, No. 3), Tables 1,2. 1964-1960 - same source (May 1971), pp.9,10. 1959-1950 - same source (March 1970), pp.8,9, as revised. Footnote 3/: The 1965-1974 series has been revised, and the 1950-1964 series is to be revised.

SHIPMENTS BY MANUFACTURING ESTABLISHMENTS
(Page 12)

Per Cent Distribution of Intercity Ton-Miles by Means of Transport

"Census of Transportation", "Commodity Transportation Survey", Shipper Survey, Bureau of the Census, D.O.C. (1972, 1967, 1963). Shipper group #9, Petroleum & Coal Products, was excluded from the table, as the 1967 tonnage estimate was revised, but no corresponding revision of ton-miles was made. With this inconsistency, shipper group #9 was excluded. The 1963 sample totals were adjusted to exclude those plants with less than 20 employees. This adjustment was necessary to make the 1963 sample totals comparable to the 1967 and 1972 sample totals. The original 1963 sample totals encompassed all plants regardless of size. In the 1963 survey, plants with less than 20 employees accounted for approximately 4% of the total tonnage originated by all plants, but consisted of 32% of the total number of plants in the universe. For this reason, these smaller plants were excluded in the 1967 and 1972 surveys. Although the 1963 sample totals were revised, the corresponding percentage distributions by means of transport were not revised. As a result, the percentages in "motor carrier' and "private truck" are slightly higher than if the percentages were ad-

justed (smaller plants accounting for a higher proportion of their shipments by highway than larger plants). These percentage differences are stated as being small. Therefore, sample totals in the 1963, 1967, and 1972 data exclude plants with less than 20 employees. In all editions: 1) Shipments were coded by the major means of transport; "local" shipments were excluded; and pipeline shipments were excluded. 2) The mode classification "other" includes: R.E.A., bus, freight forwarder (when the mode is unknown), and messenger service. "Other" includes UPS in 1972 only, and parcel post in 1967 and 1963. 3) "Unknown" includes those shipments which cannot be determined from the shipment document. 4) The distance is calculated by a computer program known as PICADAD. Distance is the straight-line miles between the plant as origin and the destination shown on the shipment paper, without allowance for circuity in the actual route used by the carrier. The actual route-mile distance is somewhat longer. On the average, railroad "short-line" and highway "direct-route" distances exceed the calculated straight-line miles by about 24% and 21%, respectively.

SHIPMENTS BY MANUFACTURING ESTABLISHMENTS
(Page 13)

Per Cent Distribution of Intercity Tons by Means of Transport

Same source as above. Distance criteria do not apply.

AVERAGE LENGTH OF FREIGHT HAUL IN DOMESTIC COMMERCE
(Page 14)

Air: Figures are computed by dividing the scheduled non-passenger domestic ton-miles for each year by domestic tonnage originating at airports in the U.S. Ton-miles - 1978-1973 - "Air Carrier Traffic Statistics", CAB (Dec. 1979), p.4, sum of lines 19 through 23. 1972-1957 - "Handbook of Airline Statistics", CAB (1973), p. 106, sum of lines 22 through 25. 1956-1949 - "Handbook of Airline Statistics, 1949-1956", CAB sum of Domestic Trunk Operations, p.2: Local Service Carriers, p.21; Helicopter Carriers, p. 42; Territorial Operations, p.68 and 78; and All-Cargo Carriers, p.81; less, line items equivalent to the above named line items for Aervias Sud Americana, p.82; Riddle Airlines, p.85; and Seaboard & Western Airlines, p.86. 1948-1947 - "Annual Airline Statistics", CAB (1948), using equivalent line items from p.35, less equivalent line items from p.32. Tons - 1979-1973 - "Airport Activity Statistics", CAB/FAA (Dec. 1979), p.10. 1972-1955 - "Airport Activity Statistics of Certificated Air Carriers", CAB/FAA (1973), p.1, and previous editions for preceding years, except for 1970 and 1961. 1954-1939 - "Air Commerce Traffic Pattern", CAA (1955), p.1.

Oil Pipeline - 1976-1975 - Advance release by Bureau of Economics, ICC. 1974-1961 - "Transport Economics", ICC (Vol. III, No. 2-1976), p.3. 1960-1939 - Same source (Feb.-March 1973), p.11.

Railroad - 1978-1939 - "Transport Statistics in the U.S., Part 1, ICC (1978), p.166, and previous years' editions.

Class I Truck - 1978-1975 - TAA estimate based on American Trucking Assns.' index of average length of haul for Class I General Carriers of Freight. 1974-1961 - "Transport Economics", ICC (Vol.III, No.2 - 1976), p.3. 1960-1939 - Same source (February-March 1973), p.11.

Water - 1978-1962 - All Modes - "Waterborne Commerce of the U.S.", U.S. Army Corps of Engineers (1978), Part 5, Sec.3, Table 1. 1961-1955 - Computed by TAA by dividing ton-miles (parenthetical figures) from "Transportation Facts & Trends", Tenth Edition, p.7, by total commerce in tons (domestic commerce) from "Waterborne Commerce of the U.S.", Corps of Engineers (1964), Part 5, Table 1B.

AVERAGE LOAD, CAPACITY, LOAD FACTOR AND LENGTH OF HAUL OF CLASS I INTERCITY CARRIERS OF PASSENGERS
(Page 15)

LOAD

Average Number of Passengers (Per Unit)

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB (Dec. 1979), line 33, p.4. 1972-1947 - "Handbook of Airline Statistics", CAB (1973); figures derived by multiplying average available Domestic Operations, seats per aircraft, Table 53, p.61 by total revenue passenger load factor, Domestic Operations, Table 18, p.26.

Bus: 1979 - Advance release by American Bus Association. 1978-1972 - "A Report from the American Bus Association", ABA (1979), Table 8. 1971-1968 - "Bus Facts", ABA (1973), p.19. 1967-1947 - Same source (1966), p.14.

Rail: 1979-1964 - Figures derived by dividing total passenger miles by total car miles. Source: Association of American Railroad's OS-A Reports, 4th Quarter, each year. 1963-1947 - "Statistics of Railroad Passenger Service", AAR (Oct. 1966), column 3, p.21.

Total Passenger-Miles (millions)

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB (Dec. 1978), line 9, p.4 1972-1947 - "Handbook of Airline Statistics", CAB (1973), Table 15, p.23.

Bus: 1979 - Advance release from ABA. 1978-1970 - "A Report from the American Bus Association", ABA (1979), Table 3. 1969-1968 - "Bus Facts", ABA, p.18. 1967-1947 - Same source in preceding years' reports.

Rail: 1979-1977 - "Yearbook of Railroad Facts", AAR (1980), p.32. 1976-1965 - "Statistics of Railroads of Class I in the U.S.", AAR (Dec. 1977), p.7. 1964-1947 - Same source for each respective year.

CAPACITY

Average Number of Seats (Per Unit)

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB (Dec. 1979), line 34, p.4. 1972-1947 - "Handbook of Airline Statistics", CAB (1973), Table 53, p.61. Figures represent average available seats per aircraft.

Bus: 1979-1965 - Estimated by ABA. 1960-1947 - "Bus Facts", ABA (30th Edition), and equivalent predecessor table in prior issues. Figures for the cited years were arrived at by taking the average of a 7 year period and adding 6%; i.e., 1960 is average of 1960-1954; 1955 is average of 1955-1949; 1947 is average of 1947-1941 and 1939 is average of 1939-1927. The 6% increase has been applied because of studies by NAMBO, in 1958 and 1962, wherein it was determined that the average bus capacity for any one year was about 6% higher than the 7 year average of the seating capacity of buses manufactured during the 7 year period.

Rail: 1979 - AAR estimate. 1978-1965 - "Statistics of Railroads of Class 1 in the U.S.", AAR (Dec.1979), p.10. 1964,1963 - Same source (August 1974), p.10. 1962-1947 - Same source for each respective year.

Total Seat Miles (millions)

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB (Dec. 1979), line 12, p.4. 1972-1947 - "Handbook of Airline Statistics", CAB (1973), Table 14, p.22.

Bus: 1979-1947 - Same source as "Bus", above. Figures derived by dividing the total passenger-miles by the load factor.

Rail: 1979-1947 - Same source as "Rail", above. Figures derived by dividing passenger-miles by the average number of passengers per unit, and multiplying the result by the average number of seats per car.

LOAD FACTOR

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB (Dec.1979), line 15, p.4. 1972-1947 - Same method as "Bus and Rail", below.

Bus and Rail: 1979-1947 - Same source as "Bus" and "Rail" in "CAPACITY", above. Load factor is the percent of capacity utilized; it is determined by dividing either the average number of passengers per unit by the average number of seats per unit, or by dividing the total passenger-miles by the total available seat miles.

LENGTH OF HAUL

Air: 1979-1973 - "Air Carrier Traffic Statistics", CAB, (Dec. 1979), line 38, p.4 1972-1947 - "Handbook of Airline Statistics", CAB (1973), Table 52, p.60.

Bus: Figures derived by dividing passenger miles by vehicle (regular route intercity) miles. 1979- Advance release by ABA. 1978-1960 - "A Report from the American Bus Association", ABA (1979), Table 3. 1959-1947 - "Bus Facts", ABA (1966), p.14.

Rail: TAA is now including commutation figures in computing length of haul. 1979 - "Yearbook of Railroad Facts", AAR (1980), p.35 and corresponding tables in precious editions.

NOTE: Effective with 1970 TAA has included appropriate AMTRAK and Auto-Train figures with AAR's Class 1 figures.

U.S. POSTAL SERVICE PAYMENTS TO U.S. CARRIERS FOR TRANSPORT OF DOMESTIC MAIL

(Page 16)

Rail, Highway, Water: FY-1979-1970 - USPS and POD worksheets for same source as prior years since "Cost Ascertainment Report" is no longer issued. FY-1965-1947 - "Cost Ascertainment Report" (1968), U.S. Post Office Department, Table 70, "Summary of Apportioned Costs - Transportation of Mails" and predecessor tables in prior year reports. Highway figures do not include expenditures by the Postal Service or POD for transportation of mail in USPS vehicles, nor payments for for-hire local cartage. Cost of transport in USPS vehicles was $39 million in 1947, $94.7 million in 1967, $109.5 million in 1968, $123.2 million in 1969, $134.6 million in 1970, and $157.5 million in 1971. Beginning 1972 this figure no longer available.

Air: FY-1979-1947 - Same source as above, except that 1950, and 1947 figures are estimates because there were no cost breakouts made during this period between subsidy costs and carriage of mail costs. Estimate is fifty-cents per ton-mile times "Air ton-miles for mail" shown in "CAB Handbook of Airline Statistics" (1963), p. 70, for such years.

Note: Table does not account for payments to U.S. - flag carriers and others, for transportation and handling of mail to foreign destinations. In 1972 this amounted to $127.7 million, which included $7.8 million for water transportation; $106.7 million for air transportation; and $13.2 million for terminal and transportation charges by foreign countries. These figures not available after 1972. Also, U.S. Postal Service statistics no longer show costs by class of mail as was shown in prior years, therefore, such breakdown cannot be shown after 1970.

PASSENGER FATALITIES IN TRANSPORT VEHICLES
(Page 17)

Domestic Scheduled Air Carriers: 1979 - "Transportation Information Safety Report" DOT (May, 1980), p. 38. 1978-1976 - "Air Transport 1979". ATAA (1979), p.19. 1975-1947 - "FAA Statistical Handbook of Aviation", FAA (1975), Table 10.8 and equivalent table in preceding years' reports.

Class I Intercity Bus: - 1978 - 1956 - Unpublished from ABA.

Rail: 1979-1976 - "Transportation Safety Information Report", DOT (May, 1980) p.26. 1975-1947 - "Accident Facts", National Safety Council (1976), Table "Passenger Deaths and Death Rates, 1956-1975", p.75; and equivalent table in preceding years' editions.

Local Transit: 1978-1954 - "Accident Facts", National Safety Council (1979), footnote to Table "Transportation Accident Death Rates, 1976-1978", p.75, and equivalent table in preceding editions. This rate is only roughly comparable to the other modes in the table because it is based on reports of only about one-half of the transit industry, and is limited to city transportation.

Auto: 1978-1947 - "Accident Facts", National Safety Council (1979), p.75.

General Aviation: 1979-1976 - "Transportation Safety Information Report", DOT (May, 1980), p.43. 1976 - National Transportation Safety Board press release, Table 11, (Jan. 13, 1977). 1975-1972 - "FAA Statistical Handbook of Aviation", FAA (1975), Table 10.10. 1971-1961 - Same Source, FAA (1972), Table 11.18. 1960-1947 - Equivalent tables in previous years' reports. Note: The source shows the number of fatalities but shows the rate in terms of fatal accidents. TAA has divided the number of fatalities shown by the estimated plane-miles flown times one-hundred at a fatality rate per 100-million plane-miles flown. Passenger-miles are not available for this class of flying; however, some studies indicate that the average rate of occupancy per plane is something less than two persons. For these reasons this fatality rate is not exactly comparable to rates shown for other modes of transport.

Water Transport: 1978 - TAA estimate. 1977-1947 - "Accident Facts", National Safety Council (1979), Table "Accidental Deaths Classified According to the International List of Causes of Death", p.12, and equivalent table in preceding editions.

Motorcycle: 1978-1960 - "Accident Facts", National Safety Council (1979), Table "Motorcycle and Total Vehicle Data, 1960-1978", p.56. This information includes deaths on motor scooters and motor bikes.

INTERCITY TRAVEL BY MODES
(Page 18)

Private Carriers

Auto: 1979 - TAA estimates based on annual increases of total motor vehicle-miles on main rural highways (Source: "Traffic Volume Trends", Table 4, FHWA, published monthly). 1978-1973 - TAA estimates based on annual increases in personal passenger vehicle-miles on Interstate Rural and other main rural highways (Source: "Highway Statistics", Table VM-1, FHWA, published annually). 1972-1949 - "Transport Economics", ICC (Aug.-Sep. 1973), p.10 and equivalent table in preceding annual reports. 1948-1939 - Calculated by adjusting passenger-miles ("Transport Economics", August 1962, p.1), using 1959 as the base, in direct proportion to the yearly percentage change in rural passenger vehicle-miles. This was necessary because ICC's 1939-1954 series was not constructed to be comparable to the 1955-1963 series based primarily on revising the number of passengers per vehicle from 1,945 to 2.1 In light of the revision, TAA's published 1939-1948 figures were 8% low and have been adjusted accordingly.

Air: 1979-1975 - Calculated by increasing TAA's computed figures for 1974 by the estimated hours flown in general aviation. Source: "FAA Statistical Handbook of Aviation", FAA (Sep. 1979), Table 8.4 1974-1959 - Calculated by subtracting TAA's computed figure for "Public Carrier - Air" from total domestic air passenger miles, which is obtained from the following sources: 1974-1973 - unpublished data from Bureau of Economics, ICC; 1972-1959 - "Transport Economics", ICC (Aug.- Sept. 1973), p.10, and equivalent tables in preceding years' reports. 1958-1939 - Computed by applying to 1959 "Private Carrier - Air" passenger-miles the ratios of general aviation business miles each year to 1939 general aviation business miles ("FAA Statistical Handbook" (1944), Table 5.3, p.64 . It is assumed private flying in 1945-1943, for which figures are unavailable, was nil.

Public Carriers

Air: Sum of domestic passenger-miles of the certificated route scheduled and non-scheduled carriers, plus the supplemental carriers. 1979-1970 (all carriers): "Air Carrier Traffic Statistics", CAB (Dec. 1979)

pp.4,121; and equivalent tables in preceding years' reports. 1969-1959 - (scheduled, non-scheduled): "Handbook of Airline Statistics", CAB (1973), pp.23, 106; and equivalent table in preceding years' reports. 1969-1959 (supplementals): Unpublished data from the CAB. 1958-1939 (all carriers): 1958-1939 - "Annual Report", ICC for each succeeding year, from Table, "Intercity Passenger-miles, public and private, by kinds of transportation", less passenger-miles in this TAA tabulation attributed to "Private Carrier - Air".

Bus: 1979 - Preliminary release from ABA. 1978-1973 - "A Report From The American Bus Association", ABA 1979 Table 2. 1972-1959 - "Transport Economics", ICC (Aug.-Sep. 1973), p.10; and equivalent table in preceding years' reports. 1958-1957 - "Annual Report", ICC for each year. Since ICC figures for period 1939-1961 are given in three separate, but incomplete series, two adjustments were necessary to determine an estimated single comparable series. Figures for 1949-1956 were determined by reducing figures for these years, shown in "Intercity Passenger-Miles, 1949-1956", ICC Statement No. 580, Table 1, January 1958, by 16%, the percentage difference between the overlapping 1957 figures for the two series, as shown in the 72nd and 73rd ICC Annual Reports. Figures for 1939-1948 were determined by increasing the figures for these years, as shown in the ICC Annual Reports, by 21%, the average annual difference for the overlapping figures for the years 1949-1952 in the two series. These adjusted figures were then reduced by 16% to make them roughly comparable to the latest series.

Rail: 1979-1975 "Yearbook of Railroad Facts", AAR (1980), p.36; and equivalent tables in preceding editions. 1974-1973 - Unpublished data from the Bureau of Economics, ICC. 1972-1959 - "Transport Economics", ICC (Aug.-Sept. 1973), p.10; and equivalent table in preceding years' reports. 1958-1939 - ICC Annual Reports.

Water: For lack of reliable source data, TAA has eliminated the intercity water column from the table.

Note: 1969 and later - Public-Air figures include as domestic operations the operations between the 48 states and Alaska and Hawaii. This previously was considered as being "International and Territorial." The 1969 figure on the old basis would be 101.6 billion passenger-miles.

INTERCITY PASSENGERS CARRIED

(Page 19)

Air: 1979-1973 - Enplanements - "Air Carrier Traffic Statistics", (Domestic Scheduled and Nonscheduled Carriers) CAB (Dec. 1979), p.4, Line 16 plus Line 53; and prior editions. 1972-1957 - "CAB Handbook of Airline Statistics", 1973 Edition, p.106, and 1967 Edition, p.130, both part III, Table 2, line 20 plus line 49. 1956-1939 - Originations - "CAB Handbook", 1973 Edition, Part II, Table 46, column 3, p.54, with figures shown for these years raised by 8%. This percentage increase used as the mean average by which enplanements exceeded originations for the years 1957-1969, and was necessary because originations are no longer tabulated. Therefore, figures for all years are higher than have been shown previously.

Bus: 1979 - Estimated by ABA. 1978-1970 - "A Report From the American Bus Association", ABA (1979) Table 1: 1965-1960 - "Bus Facts", NAMBO (1972), p.24; and equivalent table in preceding years' reports. Class I,II,III intercity revenue passengers are included. 1959-1939 - Same source (1966), p.13, sum of columns 4 and 6, with the figures shown for 1948-1939 reduced by 5% for column 4 and by 15% for column 6 in order to make these figures comparable to 1949 figures, when the ICC redefined Class I intercity motor carriers, and later years.

Rail: 1979-1976 - "Yearbook of Railroad Facts" (1980), p.30. 1975-1939 - "Statistics of Class I Railroads in the U.S.", AAR (Jan. 1977), p.7, and equivalent table in preceding years' reports.

Note: Several changes effected by the CAB, ABA and ICC in statistical collection make it impractical to show meaningful relationships for indices and percentages of passengers carried by mode for the years 1959-1939.

TRAVEL BY U.S. RESIDENTS

(Page 20)

GENERAL COMMENT: For year 1977, Advanced Press Release from Bureau of Census. Since the statistical methods used in these surveys all differ slightly, the comparisons indicated are general in nature.

Number of Person-Trips: For years 1972 and 1967 - Table B, "National Travel Survey 1972", U.S. Department of Commerce, Bureau of Census (1973). For year 1963 - Table 1 "National Travel Survey 1963", U. S. Department of Commerce, Bureau of Census (1964). For year 1957 - Table 1, "Travel Survey 1957", U.S. Department of Commerce, Bureau of Census, September 1958, as adjusted by "National Travel Survey 1st Quarter 1963" preliminary report, December 21, 1963.

Population of U.S.: For all years, "Economic Report of the President", Washington, D. C. (January 1973), Table C-23, p.219.

Percentage Distribution of Travelers by Means of Transport: For years 1972 and 1967, Table B, of the 1972 travel survey. For year 1963,Table 6 of the 1963 travel survey. For year 1957, Table III of the 1957 travel survey.

Percentage Distribution of Travelers by Reason for Trips: For years 1972 and 1967, Table B of the 1972 travel survey. For years 1963 and 1957 same source as above.

Percentage Distribution by Distance of Trip: For year 1972 - Table 2 minus Table 5A of the 1972 travel survey. For year 1967 - Table 6 of the 1967 travel survey and adjusted per footnote to the table. For year 1963 - Table 7 of 1963 travel survey. For 1957 - Table III and V in 1957 travel survey.

Note: The term "Person-Trips" used in the 1972 and 1967 surveys is synonymous with the term "Traveler" used in 1963 survey and with the term "Person-trip" or "Trip" used in the 1957 travel survey.

OVERSEAS TRAVEL BY U.S. RESIDENTS

(Page 21)

Basic Source: "International Travel and Passenger Fares: 1970-1979", Survey of Current Business, Department of Commerce (May 1980), pp. 28-34 and similar articles in previous years' editions. Number of Overseas Travelers - Table 5. Total Expenditures for Overseas Travel - Tables 1 and 2. Transoceanic Transportation Expenditures - Table 1 for totals. Unpublished data from Balance of Payments Division, Bureau of Economic Analysis, DOC, for Air/Sea breakdown. Ocean cruise data not available for 1977, but estimated by TAA as 10% of total.

U.S. EMPLOYMENT IN TRANSPORTATION BY OCCUPATIONS

(Page 22)

Figures taken from "Census of Population, Occupation by Industry", for 1970, 1960, and 1950, Bureau of Census, U.S. Department of Commerce, Washington, D. C. Figures for specialized transportation occupations taken as shown in sources. Figures for general occupations taken from specific transportation industries listed; i.e., transport equipment manufacturing and transport services.

The detailed list of occupational titles used in the 1950, 1960, and 1970 census all differ. Therefore, it is not possible to show numbers of persons employed for all three years under some occupational titles. This compilation has been made on the basis of the occupational titles used in the 1970 census, and 1960 and 1970 figures are from the 1970 census. Occupational titles which appeared in the 1950 and/or 1960 census, but not in the 1970 census, have been included where the number employed is significant. Those in earlier occupational titles not specifically shown have been included under the "Other" category for the particular year.

U. S. EMPLOYMENT IN TRANSPORTATION AND RELATED INDUSTRIES

(Page 23)

Basic Source: (Unless otherwise indicated) 1979-1973 - "Employment and Earnings" (March 1980), Sec. B-2, and Sec. B-2 in preceding years. 1972-1947 - "Employment and Earnings, United States, 1909-1972". Both by Bureau of Labor Statistics, U.S. Department of Labor.

TRANSPORTATION SERVICE

Air: All years - SIC 45. 1972-1947 - Basic Source, p.532.

Bus, Intercity & Rural: All years - SIC 413. 1972-1947 - Basic Source, p.529.

Local Transport: All years - SIC 411. 1972-1947 - Basic Source, p.528.

Railroads: All years - SIC 40. 1972-1947 - Basic Source, p.526.

Oil Pipe Line: All years - SIC 46. 1972-1960 - Basic Source, p.533. Figures represent employment of ICC and Non-ICC regulated companies. Comparison of available "E & ES" and corresponding ICC data show regulated companies approximately 85% of the total. Data for 1947, 1950 and 1955 - "Transport Statistics in the United States", ICC, (1955), and "Railway Statistics in the United States", ICC, (1950), adjusted upward to reflect Non-ICC regulated.

Taxi: All years - SIC 412. 1972-1958 - Basic Source, p.528. All years prior to 1958 estimated taking 3% of total Transportation and Public Utilities, p.454 in line with 1958-1963 percentage relationship.

Trucking & Trucking Terminals: All years - SIC 421, 3. 1972-1964 - Basic Source, p.530. Includes commercial companies only. Series begins with 1964 which leaves out "Warehousing". For 1963 and prior years, used 90% of SIC 42 to derive SIC 421, 3 which is the relationship for 1964.

Water: All years - SIC 44. 1972-1964 - Basic Source, p.533. 1963-1947 - data supplied to TAA by the Bureau of Employment Security, U.S. Department of Labor.

TRANSPORTATION EQUIPMENT MANUFACTURING

Aircraft & Parts: All years - SIC 372. 1972-1947 - Basic Source p.278.

Motor Vehicles & Equipment: All years - SIC 371 and 301 (Tires and Inner Tubes). 1972-1947 - Basic Source, p.507.

Railroad Equipment: All years - SIC 374. 1972-1947 - Basic Source, p.292.

Ship & Boat Building & Repair: All years - SIC 373. 1972-1947 - Basic Source, p.286.

Other Transportation Equipment: All years - SIC 375,9. 1972-1958 - Basic Source, p. 294. 1957-1947 - Estimates based on same source, 1965 edition, using "Transportation Equipment Manufacturing", p. 286.

TRANSPORTATION RELATED INDUSTRIES

Automotive & Accessory Retail Dealers: 1979-1972 - Data provided to TAA by BLS. 1971-1958 - Basic Source, sum of "Motor Vehicle Dealers", SIC 551,2; p. 575, and "Other Vehicle and Accessory Dealers", SIC 553,9; p. 576. All years prior to 1958 estimated by assuming this combined total to be 9.5% of total employment in "Retail Trade", Table SIC 52-59, p.558 in line with 1958-1963 percentage relationship.

Automotive Wholesalers: All years - SIC 501. 1972-1958 - Basic Source, p.552. All years prior to 1958 estimated

at 7% of total employment in "Wholesale Trade", Table SIC 50, p.550 in line with 1958-1963 percentage relationship.

Automotive Services & Garages: All years - SIC 75. 1974-1972 - "Employment and Earnings, U.S., 1909-1975" (1975), BLS, U.S. Department of Labor. 1971-1959 - Basic Source, p.685. 1958-1947 - Estimates from same source, 1965 edition, using "Services and Miscellaneous", p.643; and "Automobile Repair, Auto Service and Garages", p.xxxiv.

Automotive Services & Garages: All years - SIC 75. 1974-1972 - Advance release from "Employment and Earnings,U.S., 1909-1975", (1975) BLS, U.S. Department of Labor. 1971-1959 - Basic Source, p.685. 1958-1947 - Estimates from same source, 1965 edition, using "Services and Miscellaneous", p.643; and "Automobile Repair, Auto Services and Garages", p.xxxiv.

Gasoline Service Stations: All years - SIC 554. 1972-1958 - Basic Source, p.577. All years prior to 1958 based on "Census of Business 1948-54-58" Retail Summary, Table 2, and "Employment and Earnings Statistics in the United States" estimated employment data.

Highway & Street Construction: All years - SIC 161. 1972-1958 - Basic Source, p.27. All years prior to 1958 estimated to be 50% of total "Heavy Construction", Table SIC 16, p.25, in line with 1958-1963 percentage relationship.

Petroleum: For all years sum of employment in "Oil and Gas Extraction", SIC 13, "Petroleum Refining", SIC 291, and 4.5% of "Wholesale Trade", SIC 50, to account for "Petroleum Bulk Stations and Terminals", less 50% (1968-1947) and 44% (1976-1969) of the total to reflect approximate percentage of total petroleum output that is consumed by transportation. Petroleum Bulk Stations and Terminals figures, based on "Census of Business, 1948-54-58". 1972-1947 - Basic Source: SIC 13, p.16; SIC 291, p.500; SIC 50, p.550.

Other Industries:

Truckdrivers & Deliverymen: 1979-1947 - Straight-line projections based upon figures for 1970, 1960, and 1950 obtained from "Census of Population, Occupation by Industry" for those years. Figures represent total employment in this category exclusive of such employment in the transport manufacturing, trade and service industries listed therein. The ATA estimated that there were 9.065 million employed in the trucking industry in 1974.

Shipping & Receiving Clerks: Same source and method in "Truckdrivers & Deliverymen" above.

GOVERNMENT TRANSPORTATION EMPLOYEES

U.S. Department of Transportation: 1979-1964 - "Statistical Abstract of the U.S.", D.O.C. (1980), p.277 and equivalent table in preceding years. Transportation related Coast Guard military personnel included in "Other", below. Figures for previous years supplied by FAA Personnel Office, Washington, D.C. Figures prior to 1967 only include the FAA.

Highway - State & Local: 1979 - TAA Estimate. 1978-1975 - "Public Employment in 1978" Census Bureau (1978), Table 3. 1974-1951 - "Statistical Abstract of the U.S.", DOC (1975), Table 440 and equivalent table in preceding years. 1950, 1947 - Based on Census Bureau's figures for State Highway Employment.

Post Office: 1979-1966 - TAA estimate based on 14% of U.S.P.S. employment per "Annual Report of the Postmaster General, FY-71". Total U.S.P.S. employment (1979-1966) SIC 91, and (1972-1966), Basic Source, p.677. 1965-1947 - Figures furnished by the Transportation Division of the Post Office Department. Data includes only persons engaged in transport work or employees transporting or delivering mail by vehicles.

Other: 1979-1962 - "Statistical Abstract of the U.S.", D.O.C. (1980), Table 464 and "The Budget of the U.S. Government, FY-1981" (Appendix), OMB, pp.252,688. Agencies included are the CAB, FMC, ICC, Railroad Retirement Board, International Trade Commission, Maritime Administration, and an estimated percentage of the Coast Guard active military personnel (Great Lakes & Inland Waterways). The St. Lawrence Seaway Development Corporation, Alaskan Railroad, and Bureau of Public Roads are included prior to 1957. 1961-1947 - TAA estimates based on figures supplied by personnel office of such agencies.

TOTAL EMPLOYED CIVILIAN LABOR FORCE

"Economic Report of the President", (January 1980) Table B-27.

AVERAGE ANNUAL EARNINGS AND TOTAL COMPENSATION PER FULL-TIME EMPLOYEE

(Page 24)

Column (a) Average Annual Earnings: 1978-1972 - "Survey of Current Business", Bureau of Economic Analysis, U.S. Department of Commerce (July 1979), Table 6,9. 1974-1948 - Revised tables furnished by BEA, D.O.C. (March 1976). 1947- "The National Income and Product Accounts of the U.S., 1929-1965, Statistical Tables", OBE, D.O.C. (August 1966), Table 6.5.

Column (b) Average Total Annual Compensation Including Value of Supplemental Benefits: All years - "Compensation of Employees by Industry" divided by "Full-time Equivalent Employees by Industry". 1978-1972 - "Survey of Current Business", BEA, D.O.C. (July 1979), Tables 6.5 and 6.8, respectively. 1971-1947 - Tables 6.5 and 6.9, respectively, furnished by BEA (July 1976).

U.S. GOVERNMENT TRANSPORTATION RESEARCH, PLANNING, AND R&D OUTLAYS

(Page 25)

Basic Source: For all categories unless otherwise indicated, 1980 (estimate), 1979 (actual), - "The Budget of the U.S. Government", Appendix, OMB (FY-1981), pages indicated below. 1978-1960 - equivalent sections in preceding years' budgets, except figures for early years on DOT line are from Department of Commerce section.

General

DOT (Department of Commerce:) p. 684.

Department of Agriculture: p. 107. Figures are 1/6th of "Processing, storage, distribution, nutrition and food safety, and consumer services research."

Air

FAA-Aviation: pp. 697-707.
NASA-Aircraft Technical: Prior budgets.
AEC-Aircraft Propulsion Reactors: Prior budgets.

Highway

FHWA-Highways: p. 708. Safety: pp. 716,723.
Research/Planning Grants: FHWA estimates - See p. 714.

Rail

FRA-High-Speed Ground Transportation Program: Prior Budgets.
General Research and Safety: p. 727.

Urban Mass Transport

HUD-DOT: p. 735

Water

Maritime Administration: pp. 250-251.
Coast Guard: p. 692.
AEC-Merchant Ship Reactors: Prior budgets.

TOT. U.S. GOVERNMENT R&D: 1979-1960 - "Special Analysis of the budget of the U.S. Government", OMB, (1980), Table K-6 nd equivalent tables in preceding editions.

FEDERAL AND STATE EXPENDITURES FOR TRANSPORT FACILITIES

(Page 26)

Airways and Airports

Federal Expenditures: 1979-1947 - "The Budget of the U.S. Government, FY 1981" (Appendix), OMB (1980), pp. 697-706, and preceding editions. Figures are from actual expenditures using percentage relationship of obligations for certain accounts to total obligations and applying this percentage to total actual expenditures within the accounts. Total represents expenditures for Operations ; Facilities and Equipment; R and D, and Construction; Operation and Maintenance of Dulles and Washington National Airports.

State and Local Expenditures: 1978-1955 - "Government Finances in 1977-1978", Government Division, Bureau of the Census (Sept. 1979), Table 3, and equivalent table in preceding editions. 1950-1947 - not published. For these years TAA estimates that 13% of the total "Non-highway Transportation and Other Unallocable Expenditures", represents Non-highway Transportation Expenditures (based on percentage relationship for years actually reported). Figure for 1950 estimated from "1957 Census of Government", Volume IV, Number 3, Table 4, Bureau of the Census. Of the total Non-highway Transportation Expenditures, it is estimated that 37% is spent for airport facilities, based on breakdowns in "Government Finances", 1956-1964. The same procedure was followed for 1947 based on 1948 and 1946 because 1947 figures were not published.

Rivers and Harbors

Federal Expenditures: 1979-1947 - Same source and method as "Airways and Airports", above; pp. 337-350. Accounts used for total consist of General Investigations, including Navigational and Special Studies; Construction of Channels, Harbors, and Locks and Dams; Operations and Maintenance of Navigation Projects and Protection of Navigation.

State and Local Expenditures: 1978-1965 - Same table of same source as "Airways and Airports", above. 1950-1947 - Same method used as that for Airports except that water figures are estimated as 50% of total Non-highway Transportation Expenditures.

Highways

Federal Expenditures: 1979 - Advance release of Table HF-10, "Highway Statistics," FHWA, 1978-1947 - "Highway Statistics," FHWA (1978), Table HF-10, p.65, and equivalent table in preceding years' reports, for Federal funds and transferred to state and local governments and for Direct Federal Expenditures.

State and Local Expenditures: 1979-1947 - Same source as for Federal expenditures. Total expenditures are total disbursements shown less above Federal transfers and expenditures, and all debt retirement.

Amtrak and UMTA

Amtrak: 1979 - "The Budget of the U.S. Government, FY 1981" (Appendix), OMB (1980), p. 731, and previous Budgets. Figure cited inlcudes entire Amtrak outlay. UMTA: 1979 - Same source as Amtrak, p.735.

FEDERAL AND STATE TAXES DERIVED FROM TRANSPORTATION

(Page 27)

FEDERAL TAXES

Corporate Income and Profits Taxes: 1977-1947 - "Preliminary Report, Statistics of Income - 1976, Corporation Income Tax Returns", IRS (Dec 1978), Table 1, Line: "Income tax, total, amount"; and equivalent table and line in preceding editions.

Transportation Companies: 1977-1947 - Same source as above, column 35, p 7.

Transport Equipment Mfrs., except Motor Vehicles: 1977-1947 - Same source as above, column 31, p 7

Motor Vehicle and Equipment Mfrs.: 1977-1947 - Same source as above. Figures represent sum of Motor Vehicles and Equipment, column 30 as shown; plus Electrical Equipment for Transportation Vehicles, estimated for 1976-1961 at 4% of total Electrical Equipment (as shown for 1955-1947), column 29, plus Tires and Innertubes as shown for 1955, 1950, and 1947, and estimated as 70% for 1963-1961 and as 71% for 1976-1964 of total Rubber Products, column 23.

Automotive Sales and Services: 1977-1947 - Same source as above. Figures represent sum of Automotive Dealers and Service Stations-Retail, column 47, as shown; estimates of 6% of Miscellaneous Wholesale Trade, column 42, and 85% of Auto Repair: Misc. Repair Services (previously Automobile Services and Misc. Repair Services), column 62. 1960-1947 - Column 44 composed of Automobile Dealers and Gasoline Service Stations; plus Automobile Repair, Services and Garages, and other services.

Excise Taxes: 1978-1947 - "Highway Statistics, 1978", FHWA, Table FE-205 for Gasoline, Diesel, and Special Motor Fuels, Highway Use Tax, Lubricating Oil, and Table FE-206 for Trucks, Buses, and Trailers; Parts and Accessories; Tires and Tubes; and Tread Rubber. For the years 1966-1947, TAA estimated 60% of taxes collected on lubricating oil was paid by transport users. Figures shown in table have non-transport use deducted.

Transportation of Property: All years - "Annual Report of the Commissioner of the Internal Revenue Service", IRS (1978), Appendix Table 1, and equivalent table in preceding years' reports. Taxes on oil pipeline included through 1967.

Transportation of Persons: Same Source as "Transportation of Property" above.

Other Excise Taxes: All years estimated by TAA. Includes taxes paid by transport employees such as estate and gift taxes, alcohol taxes, tobacco taxes, and manufacturers' excise taxes, excluding above listed excise taxes, as taken from "Annual Report of the Commissioner of Internal Revenue Service", IRS (1976), Table 4, and predecessor table in preceding years' reports. Transport employment is the percentage found on page 23 of "Facts and Trends".

Income and Employment Taxes: Used same percentage relationship as in "Other Excise Taxes" to estimate transportation share of total of such taxes, with same source as for "Other Excise Taxes" above. Estimate considered conservative, since transport employees are generally in a higher income group than those in other areas of employment. See TAA Fact Sheet, "Average Annual Earnings and Total Compensation per Full-Time Employees" p. 24.

Total Federal Taxes: 1977-1947 - Same source as "Other Excise Taxes" above.

STATE TAXES

Basic Source: 1978-1974 - "State Tax Collections in 1979", Bureau of the Census (Jan. 1980), Table 1. 1973-1947 - "State Government Finances in 1973", Bur. of the Census, Table 1, and equivalent table in preceding years.

Corporate Income Taxes: Estimated by dividing the total of transportation "Corporate Income and Profits Taxes" ("Facts & Trends", p.27) by the total "Corporation Income and Profit Taxes." ("Annual Report of the Commissioner of the IRS", IRS (1976), Column 3, p.130). The quotient is multiplied by the total Corporate State Income Taxes. (Basic Source)

Motor Fuels: Basic Source.

Motor Vehicle and Operator Licensing: Basic Source. Sum of Motor Vehicles and Motor Vehicle Operators.

Other State Taxes: Includes all other state taxes shown in basic source and not included in the above three items. Excluded are license taxes on Corporations in General and Individual Income Taxes. To this sum is applied the percentage transport employment is of total employment, as found on Page 23 "Facts and Trends".

Individual Taxes: Same method as Federal Income and Employment Taxes.

Total State Taxes: Basic Source.

NET INVESTMENT IN PRIVATELY OWNED TRANSPORT EQUIPMENT AND FACILITIES

(Page 28)

All figures represent, to the extent possible, cash, materials and supplies on hand, and property and equipment used for transport purposes, less depreciation.

Air Carrier

Commercial - Figures cover all certificated route air carriers (for all years) and supplemental air carriers (since 1967) subject to CAB regulation. 1976-1972 - "Air Carrier Financial Statistics", CAB (pp.51,77, 1977 edition and p. 52, 1973 edition). 1971-1947 - "Handbook of Airline Statistics", CAB (various annual editions).

General - Figures were determined by multiplying the number of active aircraft in use, broken down by year of manufacture, by the average retail price when these planes were new, less an estimated percent depreciation. The number of active aircraft from "FAA (CAA) Statistical Handbook", FAA, except for 1947, which was estimated by TAA from CAA figures. The average retail price per aircraft is determined by taking the manufacturers' total net billing price for all aircraft in a given year, plus an estimated mark-up based on the billing price being 75% of the retail price, divided by the number of civil aircraft shipments, from Aerospace Industries Assn. data. Prior to 1947 estimated by TAA. TAA estimated depreciation based on the Aircraft Owners and Pilots Association's estimate that an active aircraft retains between 30% and 50% of its original value and I.R.S. allowance of 6 years for depreciation of general aviation aircraft. TAA feels 20% retained value doesn't overstate the value of fully depreciated aircraft, so the remaining 80% was depreciated over a period of six years at a rate of 13% per year.

Equipment Manufacturers

Motor Vehicles and Motor Vehicle Equipment - Figures for all years from "Statistics of Income: Corporate Income Tax Returns", Internal Revenue Service, for each respective year. All figures revised to show U.S. fiscal years vs. IRS accounting years shown in previous editions.
Transport Equipment Except Motor Vehicles - Same source and revisions as above.

Highway

Automobile - Derived unit values were multiplied by the number of cars in use. Unit values were determined as follows. For model years 1947-1967, the monthly prices were averaged for each model for each of the past 10 years. (Monthly prices were taken from the National Automobile Dealers Association's Table: "Retail National Averages of Used Car Prices by Year Model" for each respective model year). Cars over 10 years old were given residual values increasing from $100 to $200 to reflect inflation. For model years 1968-1976, depreciation rates were derived from NADA's used car table for model years 1962-1966, for the past 10 years. These depreciation rates were averaged, and these average rates were applied to the average vehicle selling price (Source: "Franchised New Car & Truck Dealer Facts", NADA (1977), p. 3; and the equivalent table in previous editions). The depreciated unit values were multiplied by the number of cars in operation for each year (Source: "Motor Vehicle Facts & Figures", MVMA (1978), p.34; and equivalent tables in previous editions).

Truck and Trailer - Estimates cover motor vehicles only, as no attempt was made to estimate investment in terminal facilities. To determine the average retail price of a new truck in 1976 following discontinuation of original source (see Fifteenth Edition "Transportation Facts and Trends" p.A-17), the percent increase in value of freight equipment acquired as reported in "Transport Statistics in the U.S." Part 2, ICC (1975, 1976), Table 8, was applied to the 1975 figure as shown in "Motor Truck Facts" MVMA (1975). The average annual retail value was then depreciated at an annual rate of 19% over the first 5 years, retaining a residual value of 5% for the remaining 5 years used for estimating purposes. A 5-year average depreciation period was used, as the IRS allows 4 years for depreciation on trucks under 13,000 lbs. and 6 years for trucks over 13,000 lbs. Trailer net investment: Following discontinuance of original source, Trailer net investment was estimated in same method as Truck and Trailer above. For previous years see Fifteenth Edition "Transportation Facts and Trends". The resulting average retail value was then depreciated at 15.8% for the first 6 years, retaining a 5% residual value for the remaining 4 years. A 6-year depreciation period was used, as the IRS allows 6 years for depreciation of a trailer. Average trailer life is estimated to be 10 years. No salvage values are available, so TAA did not estimate a value for trailers over 10 years in use.
Dealers, Service Stations, and Repair, Garages, etc. - Same source and construction as "Motor Vehicles and Motor Vehicle Equipment", including revisions as made therein.

Bus - Figures exclude intercity bus lines' local operations. Figures for Class I carriers taken from ICC's "Transport Statistics in the U.S." and blown up 20% to reflect Class II and III carriers. 1976-1975 figures: TAA estimates based on ABA data for Class I carriers.

Oil Pipe Line

Pipe Line - Includes both regulated and unregulated carriers. To include unregulated it is assumed that the percentage relationship between regulated and unregulated for investment is the same as that for ton-miles. Regulated investment statistics for all years from "Transport Statistics in the U.S." Part 6, ICC. Investment in unregulated pipelines is estimated at 25% of the total in 1947 and declining to 15.6% in 1976 (See "Intercity Freight Federally Regulated", p. 8). Cash and Materials & Supplies estimated for 1971-76 based on 1947-1970 data.

Railroad

Railroad: 1976-1947 - All Class I and II Railroads, Lessors and Proprietaries, REA, Private Car Lines, Electric Railways, and the Pullman Co.: "Transport Statistics in the U.S.", ICC (1976), and previous editions ("Railway Statistics").

Transit

1976-1974 - Estimated based on UMTA capital grants plus 20% for local share, depreciated at 20-year and 10-year lives for rail and bus equipment respectively. 1970-1947 - Gross investment (net investment not shown) from annual editions of "Transit Fact Book", American Public Transit Assn, less estimated depreciation. Since many rail transit systems are municipally owned and report no depreciation, TAA used 30% depreciation figures for rapid rail, based on ICC statistics for electric railways, 75% for trolleys and 50% for buses.

Water Carrier

Inland - Includes both regulated and unregulated carriers. The investment for the barge and towing industry was estimated by inflating the investment of a portion of this industry by a ratio, using vessel cargo deadweight capacity. The industry portion inflated, consisted of the regulated carriers in the Mississippi River System (Class A and B: 1947-1963, Class A: 1964-1976). The ratio was: the vessel cargo dwt. capacity for the industry portion to the vessel cargo dwt. capacity of non-self-propelled vessels for both the regulated and unregulated carriers in the Miss. R. Syst.; Atlantic, Gulf, and Pacific Coasts; and the Great Lakes. The industry portion's cargo capacity was increased by a small percentage, to represent those vessels that did not report cargo dwt. for each respective year. Sources: Investment and cargo dwt. capacity of regulated carriers in the Miss. R. Syst.: "Transport Statistics in the U.S.", Part 5, ICC, for each respective year. Total cargo dwt. capacity of non-self-propelled vessels operating on all U.S. waterways obtained from "Inland Waterborne Commerce Statistics", American Waterways Operators, Inc., published annually.

Great Lakes - The same basic method was used as that for the "Inland" carriers, with the same ICC source. Source for total number of vessels and total cargo dwt. capacity: "Annual Report of the Lake Carriers' Assoc.", for the respective year.

Ocean - TAA estimate based on U.S. subsidized, unsubsidized tanker, and unsubsidized dry cargo operators' investment. Source: "Combined Condensed Financial Statements of Subsidized and Unsubsidized Operators", MarAd, annual issues. The total tanker and dry cargo vessel investment is estimated by taking the unsubsidized operators' average investment per vessel and applying this to the balance of vessel types given in "Employment of U.S.-Flag Oceangoing Merchant Fleet", MarAd. The ship investment of subsidized operators is given in first source cited.

Total Private Tangible Assets

These figures represent the estimated total value of privately owned net tangible assets, including structures, equipment (both producer and consumer), inventories, and land. Figures for 1947 and 1950 taken from "The National Wealth of the United States in the Postwar Period", Raymond W. Goldsmith, Princeton University Press, 1962, Table A-5. Figures for 1955, 1960, and 1965 taken from table entitled "National Wealth, By Type of Asset", "Statistical Abstract of the U.S.", 1971, p. 328. Figures for 1970, 1974, and 1975 taken from same source, 1976 edition, p.428. Other years extrapolated by TAA.

EXPENDITURES FOR NEW PLANT AND EQUIPMENT BY TRANSPORT AND RELATED INDUSTRIES
(Page 29)

Source: "Survey of Current Business", BEA, U.S. Department of Commerce. 1980-1978 - Table 7, p.21 (March 1980). 1975 - Table 1, p.21 (January 1977). 1970 - Table 5, p.20, (June 1973). 1965-1947 - Table 1, p.29, (Jan. 1970).

ESTIMATED NUMBER OF PRIVATELY AND PUBLICLY OWNED TRANSPORT UNITS
(Page 30)

Motor

Automobiles: 1978-1966 - "Highway Statistics 1978", Federal Highway Administration, Table MV-1, and Table MV-1 in preceding editions. 1965-1939 - "Highway Statistics Summary of 1965", BPR, Table MV-200, p.23. Motorcycles are excluded for all years. In 1975 there were 4,966,844 privately and publicly owned motorcycles which accounted for only 2.1% of all personal passenger vehicle miles. Publicly owned automobiles (less military) in 1975 totaled 641,214 or 0.6% of the total in this category.

Commercial Buses: 1978-1960 - "Highway Statistics 1978", FHWA Table MV-10 and equivalent tables in preceding editions. 1955-1939 - Estimated by NAMBO. All figures include municipally-owned transit system buses.

School & Other Buses: 1978-1947 - Figures shown are from the same sources as "Commercial Buses" above. Publicly owned buses (less military) in 1975 totaled 232,808 or 63.2% of the total in this category.

Motor Trucks: 1978-1947 - Figures shown are from same sources "Automobiles" above. Publicly owned trucks (less military) in 1975 totaled 1,168,007 or 4.5% of the total in this category.

Truck Distribution by Weight
1972 - "1972 Census of Transportation, Truck Inventory and Use Survey", U.S. Department of Commerce, Bureau of the Census. 1967 - "1967 Census of Transportation, Truck Inventory and Use Survey", U.S. Department of Commerce, 1963 - "1963 Census of Transportation, Truck Inventory and Use Survey", U.S. Department of Commerce.

Rail

Freight Train Cars: 1978-1947 - "Yearbook of Railroad Facts", (1979), AAR, p.49, and preceding yearbooks. 1947-1939 - Sum of freight-train cars in, "Transport Statistics in U.S." (1972), ICC, Table 156, (Equipment in Service), p.50 and the predecessor tables in prior year reports, and of privately owned freight cars as reported each year in the "Official Railway Equipment Register", AAR, Washington, D.C.

Passenger Train Cars: 1978-1975 - Estimate based on Class I passenger cars. 1974-1947 - Sum of passenger cars, "Transport Statistics in the U.S.", ICC, (1974), Table 83B (Equipment in Service), and the equivalent tables in preceding editions; plus Pullman owned passenger cars, "Transport Statistics in the U.S.", Section E, ICC (1968), p.384 and equivalent tables in preceding editions. 1968 was the last year for Pullman Company reports.

Locomotives: 1978-1975 - Estimate based on Class I locomotives. 1974-1939 - "Transport Statistics in the U.S.", ICC (1974), Table 83B (Equipment in Service), and equivalent tables in preceding editions.

Air

Single, Twin, Three and Four Engine: 1978-1972 - U.S. Air Carrier Fleet: "FAA Statistical Handbook of Aviation", FAA (1978), Table 5.3 and the equivalent table in preceding editions. Active General Aviation Fleet: data furnished by the FAA. 1971-1959 - "FAA Statistical Handbook of Aviation" FAA (1972), Tables 8.5 and 8.6, pp.183-4, and predecessor table in prior years' reports. 1958-1947 - "CAB Statistical Handbook of Civil Aviation" for indicated years. Figures shown are aircraft "eligible to fly" as shown in source for each year except 1947. 1947 figures estimated by applying to 1947 figures the percentage of eligibles to totals for the succeeding years.

Water

Barges: 1977-1970 - "Domestic Waterborne Trade of the U.S., 1973-1977", (1977), Maritime Administration, p.14. 1965-1950 - "Summary of U.S. Flag Passenger and Cargo Vessels Operating or Available for Operation", on December 31 of indicated year, Corps of Engineers, U.S. Army. 1947 figures are TAA estimates.

Towboats: 1977-1970 - "Inland Waterborne Commerce Statistics", American Waterways Operators, Inc., (1977), p.2. 1965-1950 - "Summary of U.S. Flag Passenger and Cargo Vessels Operating or Available for Operation", on December 31 of indicated year, Corps of Engineers, U.S. Army. 1947 figures are TAA estimates.

Ships: 1978-1973 - "U.S. Merchant Marine Data Sheet", MarAd (Jan. 1, 1979), Table "Vessels of 1,000 gross tons and over, excluding privately owned tugs, barges, etc." and the same table in preceding years. 1972-1939 - "Employment Report of U.S. Flag Merchant Fleet Oceangoing Vessels 1,000 Gross Tons and Over", as of December 31 of indicated years, MarAd, U.S. Department of Commerce, Table 1. Includes active vessels MarAd-owned and privately-owned but excludes U.S. Army and U.S. Navy-owned merchant ships and ships which operate exclusively on the Great Lakes and/or inland waterways.

BASIC INTERCITY TRANSPORTATION MILEAGE WITHIN THE CONTINENTAL UNITED STATES
(Page 31)

Airways: 1978-1965 - "FAA Statistical Handbook of Aviation", Federal Aviation Agency (1978), Table 2.1, and equivalent table in preceding editions. 1964-1952 - same source, (1969), Table 2.1, p.12. 1951-1939 - same source (1963), Table 3.1, p.24. 1974-1965 - mileage shown is the total of columns 1, 2, 4 in the table, multiplied by a factor of 1.151 in order to convert nautical miles to statute miles for comparability with other modes. 1964-1939 - mileage shown is the total of columns 1, 2, 5 in the cited table multiplied by 1.151. 1952-1961 airway figures include low/medium frequency routes and very high frequency routes. The latter came into use in 1962. The low/medium frequency routes are gradually being eliminated. Jet routes are included from 1960.

Highways: 1978-1969 - "Highway Statistics 1978" Section 4, Federal Highway Administration, Table SM-2, and Table SM-2 in preceding editions. Figure is the total of primary and secondary roads, including municipal extensions; minus mileage for Alaska and Hawaii; minus column DE (soil, slag, gravel, stone surfaced); plus total toll facilities mileage, minus corresponding mileage for Alaska and Hawaii. 1969-1956 - Same source, except by Bureau of Public Roads, Department of Commerce. 1955-1939 - "Highway Summary to 1955", BPR, Table SMW-200, pp.133-135. Figure is first column total less "surface type" A, B, C, (unsurfaced) D, and E mileages.

Pipelines: 1978-1950 Mileage for every third year reported and shown in "Energy Data Reports" DOE (Dec. 1977), Table 1, p.2. (Previously "Mineral Industry Surveys", U.S. Bureau of the Mines). 1960-1958 and 1955, 1952, 1949 - Petroleum Facts and Figures" API (1961), p.92. All intervening years estimated by TAA. 1949-1939 - same source (1959) p.153.

Railroads: 1978-1951 - "Yearbook of Railroad Facts", Association of American Railroads (1980) p.46 1951-1939 - "Transport Statistics in the U.S.", Part I, ICC (1962), p.103

Waterways: 1978-1960 - "Inland Waterborne Commerce Statistics", American Waterways Operators, Inc. (1978) p.1 and equivalent table in preceding editions. Mileages for these years represent the total length of all commercially navigable inland channels including those improved by the Federal, state, and local government and those which have not been improved but are usable for commercial navigation. 1959-1953 and 1951-1939 - There were approximately 235 more miles of commercial waterways in 1960 than in 1952, which was an average increase of about 29 miles per year. The Corps of Engineers reports the improved waterway mileage had increased slightly since 1939. Therefore, the 29 miles per year average increase was applied to each year. 1952 - "Mileage of United States Waterways Authorized for Improvement by the Corps of Engineers", Board of Engineers for Rivers and Harbors, U.S. Army Corps of Engineers (June 30, 1952), pp.1-3.

TRANSPORTATION DEMAND VS.TOTAL DOMESTIC DEMAND FOR PETROLEUM
(Page 32)

Highway

Motor Fuel: 1978-1965 - Highway Statistics, Federal Highway Administration (1978), Table MF-2, Section 1, p.5 and predecessor tables in prior annual reports. Gallons converted to barrels at 42 gallons per barrel, per Petroleum Facts & Figures, American Petroleum Institute (1971), p.587

Asphalt Paving Products and Road Oils: 1978-1955 - Mineral Industry Surveys, "Sales of Asphalt in 1978" and preceding annual editions (titled "Shipments of Asphalt..." prior to 1971), U.S. Department of the Interior, Bureau of Mines, Table 1, p.2 (asphalt paving products) and Table 5, p.6 (road oils), and predecessor tables in prior annual reports. Short tons converted to barrels at 5.54 barrels per short ton of asphalt and 5.90 barrels per short ton of road oils, per "Petroleum Facts & Figures", API (1971), p.588.

Water and Rail

Diesel Fuel and Distillate and Residual Fuel Oil: 1978 - Energy Data Reports "Sales of Fuel Oils and Kerosene In 1978", Dept. of Energy, Energy Information Administration, Tables 2,3 p.4 ("Railroads" and "Vessels"). 1975-1955 - Mineral Industry Surveys,"Sales of Fuel Oils and Kerosene in 1975" and preceding annual editions (titled "Shipments of Fuel Oils and Kerosene" prior to 1969), U.S. Department of Interior, Bureau of Mines.

Air

Aviation Gasoline and Jet Fuel: 1978-1955 - calculated by subtracting military consumption from total consumption: Military from "Military Petroleum Requirements", U.S. Department of Defense, Directorate for Energy; total from Petroleum Statements, "Crude Petroleum, Petroleum Products and Natural Gas Liquids: 1978 (Final Summary)", Bureau of the Census, Table 13, p.14, and predecessor tables in prior annual reports.
1960 and 1955 - calculated by adding general aviation, certificated route carrier, and supplemental carrier consumption: general aviation and certificated route carrier from "FAA Statistical Handbook of Aviation", FAA (1970), the sum of Table 6.28, p.148, and Table 9.12, p.212, and predecessor tables from prior annual reports; supplemental carrier estimated by TAA at 6.6% certificated route carrier for 1960 and 8.1% certificated route carrier for 1955 based on ratio of supplemental carrier to certificated route carrier revenue ton-miles for respective years, with ton-mile figures from "Handbook of Airline Statistics", CAB (1973), Table 4, p.12. Gallons converted to barrels at 42 gallons per barrel per "Petroleum Facts & Figures", API (1971), p.587.

All Modes

Lubricants: 1978 - TAA Estimate of 0.96% Total Transportation demand for Petroleum, 1975 - Current Industrial Reports, "Sales of Lubricating and Industrial Oils and Greases", Bureau of the Census (1975), Table 1, p.2 1974 - TAA estimate of 0.96% total transportation demand for petroleum. 1970 - unpublished from API. 1965 and 1960 - "Petroleum Facts & Figures", API (1971), p.405 and predecessor tables in prior biennial reports. 1955 - TAA estimate of 1.8%total transportation demand for petroleum. Figures include aviation and automotive lubricants only. Gallons have been converted to barrels at 42 gallons per barrel, and pounds have been converted to barrels at 315 pounds (of grease) per barrel, per "Petroleum Facts & Trends", API (1971), pp. 587-588.

Total Domestic Demand

1978-1970 - Unpublished from API. 1965-1955 - "Petroleum Facts & Figures", API (1971), p.283 and predecessor tables in prior biennial reports.

Petroleum Transport by Mode of Transport

Tons: 1977-1972 - "Shifts in Petroleum Transportation", Association of Oil Pipe Lines, (1979) Table 1. 1965-1939 - Same source (May 1976), Table 1, and predecessor tables from prior annual reports. Figures as published for each mode have been rounded to nearest million tons, therefore total shown may vary slightly from totals as published in source.
Ton-Miles - Same source, Table 4 1978 issue.

PETROLEUM CONSUMPTION BY MODE OF TRANSPORT
(Page 33)

1978 - All modes except Truck: Advance Release "Transportation Energy Data Book, Edition 4", Oak Ridge National Laboratory. 1978 Truck - "Highway Statistics 1978", FHWA (1978), Table VM-1, p.47. 1977-1965, except 1972 - "Transportation Energy Data Book, Edition 3" (1979), Table 2.8. 1972 - "Transportation Energy Data Book, Edition 1" (1976), p.66.

STANDING CONGRESSIONAL COMMITTEES HAVING JURISDICTION OVER TRANSPORTATION
(Page 34)

Information taken from "1977 Congressional Staff Directory", 19th Edition (May, 1977), Congressional Staff Directory, Mount Vernon, Virginia. Page references for key transport committees are:

Senate: Commerce, Science and Transportation - p. 163; Environment and Public Works - p. 166
House: Interstate and Foreign Commerce - p. 357; Merchant Marine and Fisheries - p. 361; Public Works and Transportation - p 364
Note: The House Committee structure was revised in 1970, the Senate's in 1977

TRANSPORT RESPONSIBILITIES IN THE EXECUTIVE BRANCH
(Page 35)

President - "Federal Aviation Act of 1958", section 801 for authority relating to international air transport. Appointment authority granted by acts of Congress; i.e. section 11 of the Interstate Commerce Act, section 201 (a) of the Merchant Marine Act, sections 201 and 301 of the Federal Aviation Act.
U.S. Postal Service - "Appendix to the Budget for Fiscal Year 1978", p.914.
All Others - The remaining information was obtained from "U.S. Government Organization Manual 1977/78", U.S. Government Printing Office, Washington, D.C. Page references are as follows:

Department of State, p.379-402
Department of Commerce
- U.S. Travel Service, p.160
- Maritime Administration, p.151

Department of Housing and
- Urban Development, p.291

Department of Transportation, p.403-429

Department of Defense
- Corps of Engineers, p.197-198
- Military Airlift Command, p.185
- Military Sealift Command, p.221
- Military Traffic Management and Terminal Service, p.200

General Services Administration, p.555-558
National Transportation Safety Board, p.592-595

DEPARTMENT OF TRANSPORTATION--ORGANIZATION AND REPSONSIBILITIES
(Page 36)

Department of Transportation came into existence on April 1, 1967. Source data for all listed functions, subordinate agencies and organizations is "Public Law 89-670" (October 15, 1966) and below cited pages in "United States Government Organizational Manual, 1977/78", U.S. Government Printing Office, Washington, D.C."

Secretary, Under Secretary, Assistant Secretaries, and General Counsel, p.410-412, and "Transportation, U.S.A." fall, 1977,DOT, p.28.
U.S. Coast Guard, p.413-415
Federal Aviation Administration, p.415-417
Federal Railroad Administration, p.419-421
Federal Highway Administration, p.417-419
Bureau of Motor Carrier Safety, p.418-419
St. Lawrence Seaway Development Corp., p.426
Urban Mass Transportation Administration, p.423-425
National Highway Traffic Safety Admn., p.421-423
Research and Special Programs Directorate, "Directory-DOT", January, 1978, p.168.

FEDERAL TRANSPORTATION REGULATORY AGENCIES
(Page 37)

Source for Interstate Commerce Commission, Civil Aeronautics Board, and Federal Maritime Commission is "United States Government Manual, 1977/78", U.S. Government Printing Office. Page references: ICC, pp.567-571; CAB, pp.470-473; FMC, pp.523-527. Source for Federal Energy Regulatory Commission: "Department of Energy Fact Book--Organization & Functions", U.S. Department of Energy (Sept. 1977), p. 37.

A9125-1.201

QUARTERLY SUPPLEMENT – OCTOBER 1980

TRANSPORTATION

Facts & Trends

SIXTEENTH EDITION
(Published – July 1980)

THESE QUARTERLY SUPPLEMENTS BRING UP TO DATE, REVISE OR ADD TO THE STATISTICAL DATA SHOWN IN THE ANNUAL EDITION.

Prepared by the Research Staff of the

TRANSPORTATION ASSOCIATION OF AMERICA
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CURRENT TRAFFIC TRENDS
TRANSPORTATION PERFORMANCE INDICATORS
(All figures in millions unless otherwise indicated)

				% Change 12 mos. 1978 to 12 mos. 1979
AIR (Scheduled Air Lines)				
	9 mos. 1979	9 mos. 1980	% Change	
Domestic Passenger-miles	156,662	149,150	- 4.8	+ 11.2
International Passenger-miles	37,428	37,368	- 0.2	+ 15.5
	9 mos. 1979	9 mos. 1980		
Domestic Ton-miles (Freight, Express, Mail)	3,090	3,034	- 1.8	+ 0.02
International Ton-Miles (Freight, Express, Mail	1,832	1,886	+ 2.9	+ 1.0
HIGHWAY				
AUTO-BUS-TRUCK	8 mos. 1979	8 mos. 1980		
Vehicle-miles 1/ (Billions)	357.1	349.7	- 2.1	- 2.2
BUS (Intercity)	9 mos. 1979	9 mos. 1980		
Passenger-miles 5/	--	--	+ 0.0	+ 7.5
TRUCK (Intercity)	8 mos. 1979	8 mos. 1980		
Tonnage Survey 2/	--	--	- 15.0	- 0.7
PIPE LINE				
	12 mos. 1978	12 mos. 1979		
Barrels of Oil 4/	10,847	10,960	+ 1.0	+ 1.0
RAIL (Class I, AMTRAK and Autotrain)				
	6 mos. 1979	6 mos. 1980		
Passenger-miles (excluding commutation)	3,054	2,852	- 6.6	+ 14.6
Commutation Passenger-miles	2,469	2,544	+ 3.0	+ 5.9
	9 mos. 1979	9 mos. 1980		
Ton-Miles (000)	676.9	683.3	+ 0.9	+ 5.2
Car Loadings (cars) (000)	17,913	16,944	- 5.4	+ 2.2
Piggyback (cars loaded) (000)	1,398	1,247	- 10.8	+ 0.9
Trailer and Highway Containers (loaded) (000)	2,466	2,269	- 8.0	+ 3.2
WATER				
Great Lakes	7 mos. 1979	7 mos. 1980		
Tons - (Iron Ore, Coal, Grain) (000)	81,447	76,848	- 5.6	+ 5.0
International (000)	6 mos. 1979	6 mos. 1980		
Long Tons 3/	398,326	397,650	- 0.2	+ 6.1
Long Tons, in U.S. Flag Vessels	16,367	14,591	- 10.9	+ 10.1
Per Cent in U.S. Flag Vessels	4.1%	3.7%		
GROSS NATIONAL PRODUCT				
	6 mos. 1979	6 mos. 1980		
Constant 1972 Dollars (billions)	1,426.5	1,426.7	+ 0.0	+ 2.3
INDUSTRIAL PRODUCTION				
	8 mos. 1979	8 mos. 1980		
Seasonally Adjusted Index (1967 = 100)	152.0	146.4	- 3.7	+ 4.2

The indicators listed above are used regularly by the respective modes of transport as guides to measure current traffic trends and are the latest figures available at press time. While the specific indicators for each mode are comparable for the periods shown, they are not necessarily comparable between modes. The key column for the purpose of this tabulation is the one on the right that reflects the percentage increase or decrease.

1/ Total mileage traveled by private and commercial passenger and cargo vehicles on main rural highways.
2/ Based on ATA sample of Class I and II common carriers of general freight.
3/ All cargo in U.S. import/export trade, including liner, irregular, and tanker, excluding DOD.
4/ Sample representing approximately 70% of barrels of regulated pipelines.
5/ Estimate for Class I regular-route and charter operations.

Page 3 TRANSPORTATION OUTLAYS VS. GROSS NATIONAL PRODUCT

The Nation's Estimated Transportation Bill
(Billions of Dollars)

	1974 r	1975 r	1976 r	1977 r	1978 r
Passenger Bill	169.0	185.7	215.7	245.1	273.4
Freight Bill	123.8	124.7	143.8	164.4	186.7
Totals	292.8	310.4	359.5	409.5	460.1
Adjustments	-2.0	+.1	-1.4	-4.2	-4.8
Adjusted Totals	290.8	310.5	358.1	405.3	455.3
Gross Natl. Product	1,412.9	1,528.8	1,702.2	1,899.5	2,127.6
Percent Trans. of GNP	20.07	19.8#	20.58	20.88	20.98

r Revised.
Percentage computation excludes from "Adjusted Totals" interest on debt for private autos, which is no longer considered part of GNP.

Page 4 THE NATION'S ESTIMATED FREIGHT BILL
(In Millions of Dollars)

	1979
Highway	
Truck-Intercity	
ICC-Regulated	41,200
Non-ICC Regulated	48,963
Truck-Local	65,244
Bus	220
	155,627
Rail	
Railroads	25,210
Water	
International	7,892
Coastal, Intercoastal	
Inland Waterways	
Great Lakes	
Locks, Channels, etc.	988
Oil Pipe Line	
ICC-Regulated	5,410
Non-ICC Regulated	601
	6,011
Air	
Domestic	1,947
International	1,033
	2,980
Other Carriers	
Forwarders & REA Express	
Other Shipper Costs	
Loading & Unloading Freight Cars	1,625
Operation of Traffic Departments	706
	2,331
GRAND TOTAL	NA
GROSS NATIONAL PRODUCT (Billions of Dollars)	2,368.8
GRAND TOTAL % OF GNP	NA

1977 Census of Transportation Truck Inventory and Use Survey revises percentage of truck-miles used for personal transportation for the years 1974-1978. Space limitations prohibit the reproduction of the entire table. The revised "Truck Local" figures are: 1974-43,930; 1975-46,461; 1976-52,251; 1977-57,949; 1978-61,755. These figures will alter Highway "Total," "Grand Total" (see p.3 "The Nation's Estimated Transportation Bill" for revised grand total), and "Grand Total as % of GNP." These revisions will be shown in a later edition.

Page 5 THE NATION'S ESTIMATED PASSENGER BILL

1977 Census of Transportation Truck Inventory and Use Survey has similar effect on "Nation's Estimated Passenger Bill" (see p. 4) revising the "Small Truck" figures under "Private Transportation" for the years 1974-1978. The revised figures are: 1974-5,127; 1975-6,613; 1976-7,688; 1977-8,698; 1978-11,867. These figures will alter "Total Private," "Grand Total," (see p. 3) and "Grand Total as % of GNP." These revisions will be shown in a later edition.

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TRANSPORTATION REVENUE vs. GENERAL PRICE TRENDS
(In Cents)

Average Revenue Per Ton-Mile vs. Producer Prices

	Rail (Class I)		Truck (Class I)		Air (Domestic)		Oil Pipe Line		Barge		Producer Prices	
Year	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1947=100	Revenue	Index 1965=100	Index 1967=100	Index 1947=100
1978	2.37	219	11.20r	231r	37.10	153	NA	NA	.622	180	195	264
1979	2.62	242	11.97	247	41.30	171	NA	NA	NA	NA	216	292

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FEDERAL AND STATE EXPENDITURES FOR TRANSPORT FACILITIES
(In Millions of Dollars)

		Airways	Airports	Rivers & Harbors	Highways		Grand Total
1979	Federal	1,850	617	988	9,596		
	State & Local	--	1,906	1,045	24,389		
	Total	1,850	2,523	2,033		33,985	40,391

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EXPENDITURES FOR NEW PLANT AND EQUIPMENT BY TRANSPORT AND RELATED INDUSTRIES*
(Billions of dollars)

	1979	1980r
Non-Manufacturing Industries:		
Air Transport	3.24	3.66
Railroad Transport@	3.93	4.24
Other Transport	2.95	2.84
Total Transport	10.12	10.74
Total non-manufacturing	98.17	104.31
% Transport	10.3%	10.3%
Manufacturing Industries:		
Durable Goods:		
Transport Equipment		
Aircraft 1/	2.10	2.64
Motor vehicles	5.36	5.55
Other transport equipment	.29	.23
Total transport equip.	7.75	8.42
Total durable goods	38.23	41.71
% Transport	20.3%	20.2%
Non-durable Goods: 2/		
Petroleum	8.81	10.52
Rubber	1.35	1.16
TOTAL TRANSPORT & RELATED INDUSTRIES	28.03	30.84
TOTAL ALL INDUSTRIES	177.09	192.51
% TRANSPORT AND RELATED	15.8%	16.02%
% TRANSPORT CARRIERS ONLY	5.7%	5.6%

* Excludes agricultural business; real estate operators; medical, legal, educational, and cultural services; and nonprofit membership organizations.

1/ Includes guided missiles and space vehicles.

2/ Includes 52% of national expenditures for petroleum through 1975, 53% after 1975, and 75% of national expenditures for rubber (see Page 1).

@ This compares with AAR's estimates of capital expenditures by Class I railroads of (in billions of dollars): 3.32 in 1979.

r Revised.

ESTIMATED NUMBER OF PRIVATELY AND PUBLICLY OWNED TRANSPORT UNITS

	1978
Motor	
Automobile	116,574,999
Commercial Buses	101,558
Other Buses	396,387
Motor Trucks**	31,702,604
Rail	
Freight Cars	1,652,774
Passenger Cars	4,518
Locomotives	30,228
Air	
Single Engine	160,715
Twin Engine	28,914
Three Engine	1,184
Four Engine	1,160
Water	
Barges	28,019
Towboats	4,380
Ships	554

** According to the Census of Transportation for 1977, only a relatively small number of trucks were of the larger size, viz:

	Under 19,500 lbs.x	%	19,500-26,000 lbs.	%	Over 26,000 lbs.	%
1977	23,978,400	91.4	802,500	3.1	1,432,400	5.5

x Under 20,000 lbs. in previous census

Revision in 1977 Towboats: 4,379

TRANSPORTATION DEMAND vs. TOTAL DOMESTIC DEMAND FOR PETROLEUM
(In Thousands of Barrels)

	1979
HIGHWAY	
Motor Fuel	2,903,343
Asphalt Paving Products	166,582
Road Oils	1,894
Total	3,071,819
%	
WATER	
Diesel Fuel & Distillate	
Residual Fuel Oil	
Total	
%	
RAIL	
Diesel Fuel & Distillate	
Residual Fuel Oil	
Total	
%	
AIR*	
Aviation Gasoline	13,185
Jet Fuel	279,699
Total	292,884
%	
ALL MODES	
Lubricants	
%	
TOTAL TRANSPORTATION DEMAND	
TOTAL DOMESTIC DEMAND	6,760,530
Transport % of Total Demand	

* Excludes military use.

PETROLEUM TRANSPORT BY MODE OF TRANSPORT

	Millions of Tons	
	1977	1978
Pipeline	986	982
	48.0%r	46.5%
Water Carrier	447	503
	21.7%r	23.9%
Truck	595r	598
	28.9%r	28.4%
Railroad	29	26
	1.4%	1.2%
	2,057	2,109
	100%	100%

Billions of Ton-Miles

Year	Total Crude & Products Ton-Miles	PIPELINES Ton-Miles	PIPELINES Percent of Total	WATER CARRIERS Ton-Miles	WATER CARRIERS Percent of Total	MOTOR CARRIERS Ton-Miles	MOTOR CARRIERS Percent of Total	RAILROADS Ton-Miles	RAILROADS Percent of Total
1972	838.8	475.8	56.73	330.0	39.34	23.0	2.74	10.0	1.19
1973	843.6	507.0	60.10	296.8	35.18	25.0	2.96	14.8	1.76
1974	847.7r	506.0	59.69r	297.0	35.04r	29.0r	3.42r	15.7	1.85r
1975	846.7	507.0	59.88	298.0	35.20	27.6	3.26	14.1	1.66
1976	867.7r	515.0r	59.35r	306.9	35.37r	32.5	3.75r	13.3	1.53r
1977	923.4r	546.0	59.13r	333.3	36.09r	29.6r	3.21r	14.5	1.57
1978	1,159.4	585.8p	50.53	530.6	45.76	29.8p	2.57	13.2p	1.14

r revised
p preliminary